```
=> d his

     (FILE 'HOME' ENTERED AT 15:36:41 ON 04 APR 2006)

     FILE 'REGISTRY' ENTERED AT 15:37:14 ON 04 APR 2006
L1             STRUCTURE UPLOADED
L2              33 S L1
L3             STRUCTURE UPLOADED
L4               3 S L3
L5             569 S L3 SSS FUL

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L6             260 S L5

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L7             STRUCTURE UPLOADED
L8             441 S L7  SUB=L5 FUL
L9             128 S L5 NOT L8
L10            231 S L5 AND NRS>3
L11            214 S L8 AND L10
L12             17 S L10 NOT L11

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L13             39 S L11

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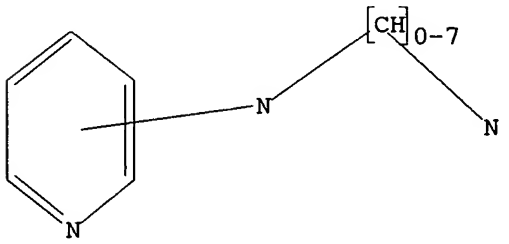


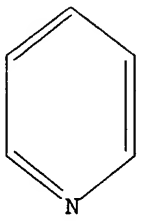


Structure attributes must be viewed using STN Express query preparation.

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=> d l3
L3 HAS NO ANSWERS
L3              STR
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

L13 ANSWER 1 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:53816 CAPLUS
DOCUMENT NUMBER: 144:143032
TITLE: Modulation of glycogen synthase kinase-3β (GSK-3β) and method of treating proliferative disorders
INVENTOR(S): Yu, Qiang
PATENT ASSIGNEE(S): Agency for Science, Technology and Research, Singapore
SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006006939 | A1 | 20060119 | WO 2005-SG223 | 20050708 |

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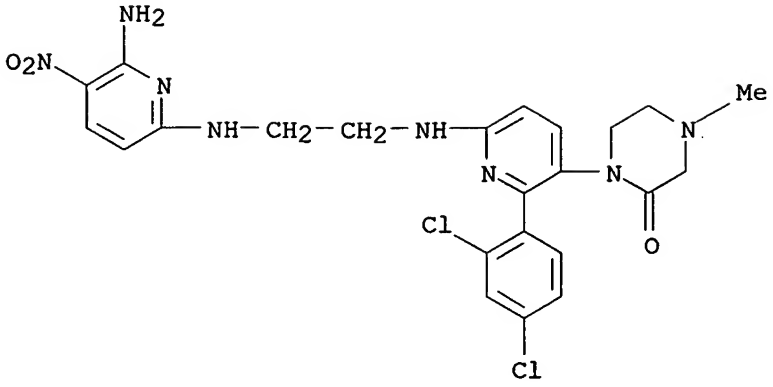
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2004-586296P P 20040709

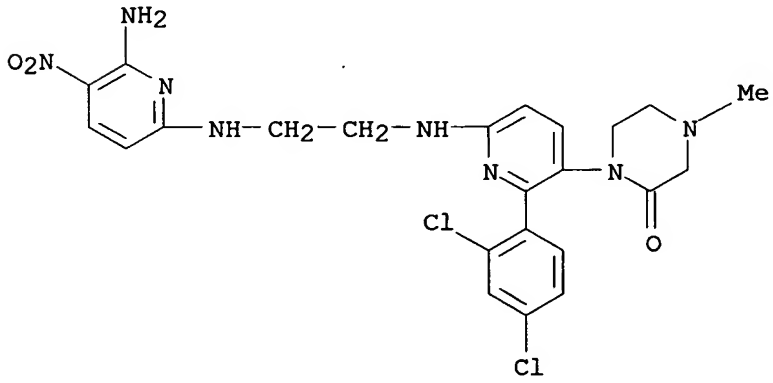
AB The invention provides methods and uses for promoting cell death, when combined with chemotherapeutic agents, in an abnormally proliferating cell, and for treating a proliferative disorder in a subject, which methods and uses involve contacting a cell with, or administering to a subject, an agent that modulates glycogen synthase kinase-3β activity to a cell that is being treated with a chemotherapeutic agent.

IT **403808-62-8**, LY 2119301
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(glycogen synthase kinase-3β modulators in treatment of proliferative disorders)

RN 403808-62-8 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



IT **403808-62-8D**, LY 2119301, analogs
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(glycogen synthase kinase-3β modulators in treatment of proliferative disorders)
RN 403808-62-8 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



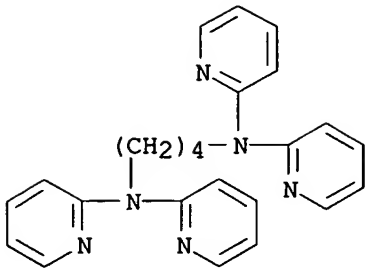
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:504127 CAPLUS
DOCUMENT NUMBER: 143:431462
TITLE: Dinuclear and mononuclear platinum(II) and palladium(II) complexes with modified 2,2'-dipyridylamine ligands featuring a cisplatin analogous structure motif
AUTHOR(S): Fakih, Sarah; Tung, Wing Chau; Eierhoff, Dirk; Mock, Christian; Krebs, Bernt
CORPORATE SOURCE: Institut fuer Anorganische und Analytische Chemie, Westfaelischen Wilhelms-Universitaet, Muenster, Germany
SOURCE: Zeitschrift fuer Anorganische und Allgemeine Chemie (2005), 631(8), 1397-1402
CODEN: ZAACAB; ISSN: 0044-2313
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English

AB In modern cancer therapy the clin. application of platinum-based drugs is more and more limited by the occurrence of intrinsic or acquired resistances. In this context the potential use of dinuclear platinum complexes in chemotherapy is increasingly relevant. The novel complexes Pd(Bzdpa)Cl2, Pd2(C4H8(dpa)2)Cl4, and Pt2(C4H8(dpa)2)Cl4 allow a direct comparison of mono- and dinuclear palladium and platinum complexes resp. deriving from a 2,2'-dipyridylamine (Hdpa) ligand system. They were characterized by single crystal x-ray anal. as well as IR spectroscopy and elemental anal. The cisplatin analogous mononuclear palladium complex Pd(Bzdpa)Cl2 (1, Bzdpa = benzylbis(2-pyridyl)amine) belongs to a range of 2,2'-dipyridylamine-based compds. which were extensively studied in the authors' labs. 1 Crystallizes in the orthorhombic space group Pna21 with a 13.722(3), b 13.457(3), c 9.483(2) Å, and Z = 4. The metal binding motif of 1 was expanded by a flexible butanediyl-linker to form the tetradentate C4H8(dpa)2 ligand. The resulting isotypic dinuclear complexes Pd2(C4H8(dpa)2)Cl4·4CH3N (2) and Pt2(C8(dpa)2)Cl4·2CH3CN (3) crystallize in the triclinic space group P.hivin.1 with a 7.8427(2), b 8.7940(2), c 11.7645(3) Å, α 79.219(2), β 84.033(2), γ 87.744(2)° (2) and a 7.831(5), b 8.814(5), c 11.817(5) Å, α 79.271(5), β 83.571(5), γ 88.063(5)° (3), both with one centrosym. mol. in the unit cell.

IT **868159-27-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of palladium (benzyl)dipyridylamine chloro mononuclear and palladium and platinum butanediylbis(dipyridylamine) chloro dinuclear complexes)

RN 868159-27-7 CAPLUS
CN 1,4-Butanediamine, N,N,N',N'-tetra-2-pyridinyl- (9CI) (CA INDEX NAME)

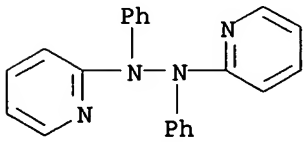


REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:1106717 CAPLUS
DOCUMENT NUMBER: 143:326169
TITLE: NO-release ability and DNA-damage activity of aromatic N-nitroso compounds
AUTHOR(S): Tanno, Masayuki; Sueyoshi, Shoko; Fukuhara, Kiyoshi; Miyata, Naoki; Okuda, Haruhiro
CORPORATE SOURCE: National Institute of Health Sciences, Tokyo, 158-8501, Japan
SOURCE: Kokuritsu Iyakuhin Shokuhin Eisei Kenkyusho Hokoku (2004), 122, 10-15
CODEN: KISHFC; ISSN: 1343-4292
PUBLISHER: Kokuritsu Iyakuhin Shokuhin Eisei Kenkyusho Kagaku Busshitsu Johobu
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB To develop a new nitric oxide-donor (NO-donor) that is useful for chemical and biochem. research, we synthesized several aromatic N-nitroso compds. including 1-[N-nitroso-N-(4-tolyl)carbamoyl]piperidine-4-carboxylic acid (1f) and phenyl(2-pyridyl)-N-nitrosamines, which spontaneously generate NO at ambient temperature Thermal decomposition of these compds. was run under mild conditions. Gaseous NO released from them was quantified by means of the Griess reaction using a specially designed apparatus in which NO2- is generated from NO. The structure of products arose from the radical cleavage of N-NO bond was clarified by chemical and spectral studies. Generation of NO from the N-nitroso compds. was also confirmed by ESR spectroscopy. The action of these NO-releasing compds. against DNA was examined When the pBR 322 DNA was treated with 1f at 37° for 3 h, the DNA single-strand breaks was 31% for 1 mM of 1f. The denitrosated compound and sodium nitrite did not show any effective DNA-cleaving activity. On the other hand, aromatic N-nitrosamines induced weak DNA-cleaving activity under the same condition.

IT **865476-16-0**
RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)
(degradation product; NO-release ability and DNA-damage activity of aromatic N-nitroso compds.)
RN 865476-16-0 CAPLUS
CN Pyridine, 2,2'-(diphenylhydrazo)bis- (9CI) (CA INDEX NAME)



L13 ANSWER 4 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:642180 CAPLUS
DOCUMENT NUMBER: 142:447377
TITLE: Polynucleotides and Their Components in the Processes of Aromatic Nucleophilic Substitution: II.1 Nucleophilic Modification of 3',5'-Bis-O-(α,β,α',β'-tetrafluoropyrid-γ-yl)thymidine
AUTHOR(S): Litvak, V. V.; Mainagashev, I. Ya.; Bukhanets, O. G.
CORPORATE SOURCE: Novosibirsk Institute of Bioorganic Chemistry, Siberian Division, Russian Academy of Sciences, Novosibirsk, 630090, Russia
SOURCE: Russian Journal of Bioorganic Chemistry (Translation of Bioorganicheskaya Khimiya) (2004), 30(4), 337-343
CODEN: RJBCET; ISSN: 1068-1620
PUBLISHER: MAIK Nauka/Interperiodica Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 142:447377

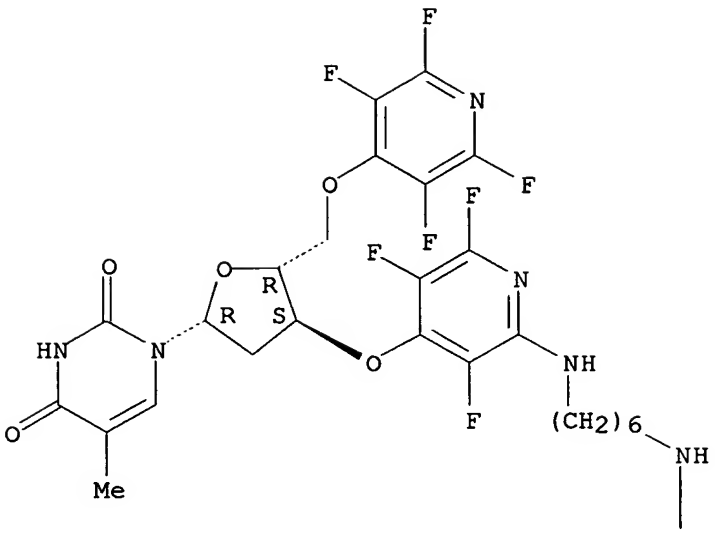
AB The interaction of 3',5'-bis-O-(α,β,α',β'-tetrafluoropyrid-γ-yl)thymidine with various nucleophilic reagents was studied to evaluate the possibility of mol. design of new types of nucleic acid analogs using arom nucleophilic substitution reactions. The reactions with morpholine and sodium azide led to the introduction of one and two nucleophilic residues into each of the Poly-fluorinated pyridine rings. The nucleophilic polycondensation with bifunctional reagents ethylenediamine and hexamethylenediamine depended on the nature of nucleophile and reaction conditions and resulted in the formation of supra-mols. containing about five or more than 20 pyrimidine bases.

IT **851136-94-2P 851136-95-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of polynucleotides and their components in processes of aromatic nucleophilic substitution of 3',5'-bis-O-(α,β,α',.beta.'-tetrafluoropyrid-γ-yl)thymidine)

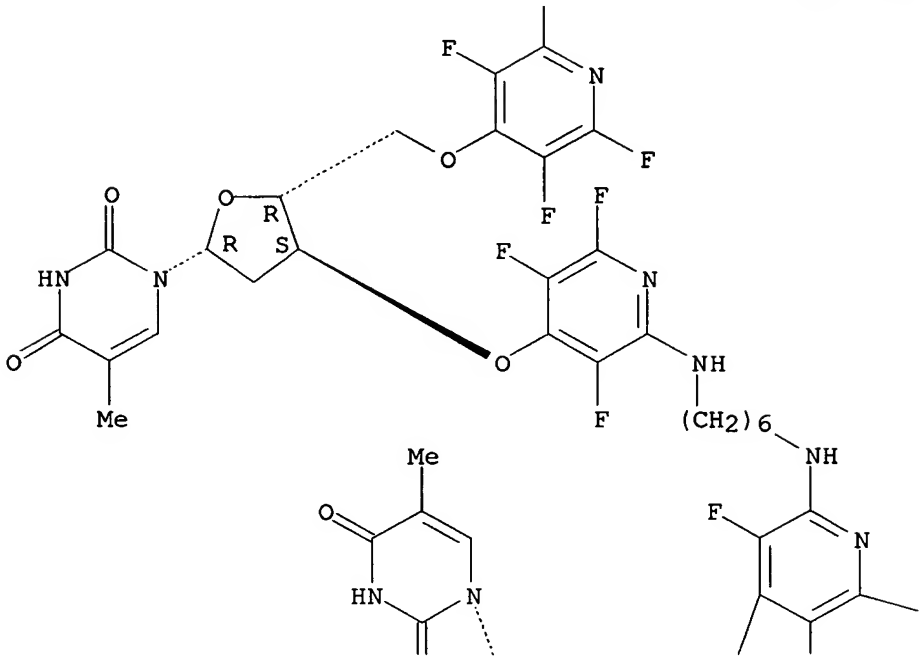
RN 851136-94-2 CAPLUS
CN Thymidine, 3'-O-dephosphinico-5'-O-(2,3,5,6-tetrafluoro-4-pyridinyl)thymidylyl(3,5,6-trifluoro-4,2-pyridinediyl)imino-1,6-hexanediylimino(3,5,6-trifluoro-2,4-pyridinediyl)-(3'→5')-3'-O-dephosphinicothymidylyl(3,5,6-trifluoro-4,2-pyridinediyl)imino-1,6-hexanediylimino(3,5,6-trifluoro-2,4-pyridinediyl)-(3'→5')-3'-O-dephosphinicothymidylyl(3,5,6-trifluoro-4,2-pyridinediyl)imino-1,6-hexanediylimino(3,5,6-trifluoro-2,4-pyridinediyl)-(3'→5')-3'-O-[2-[(6-aminohexyl)amino]-3,5,6-trifluoro-4-pyridinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



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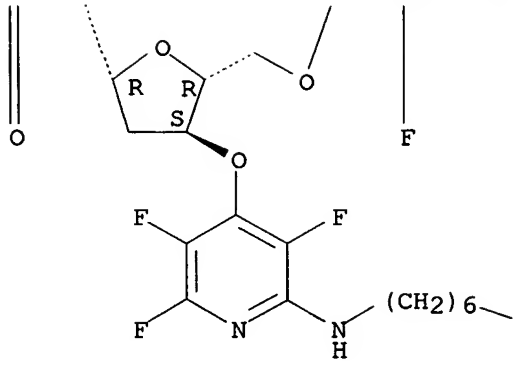
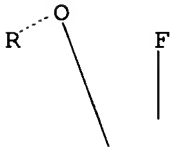
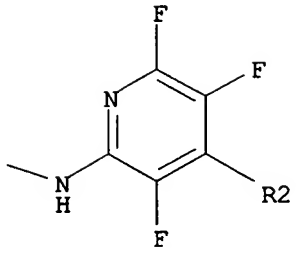
PAGE 3-A





PAGE 3-B

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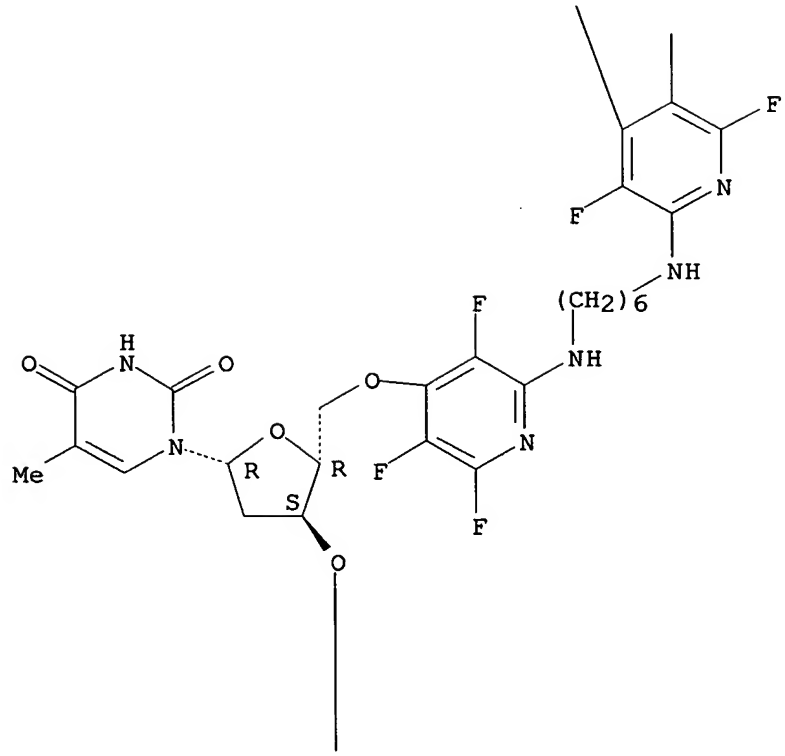

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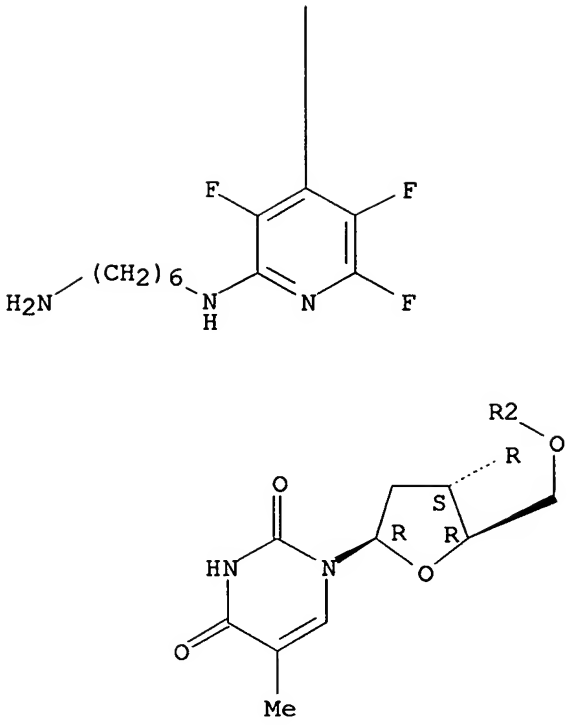
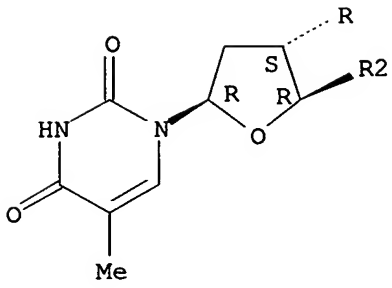
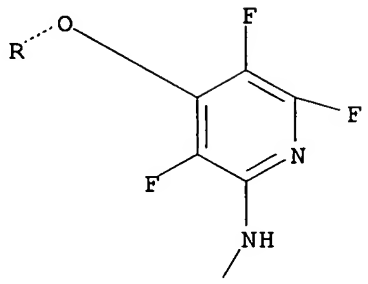


RN 851136-95-3 CAPLUS
CN Thymidine, 5'-O-[2-[(6-aminohexyl)amino]-3,5,6-trifluoro-4-pyridinyl]-3'-O-dephosphinicothymidylyl(3,5,6-trifluoro-4,2-pyridinediyl)imino-1,6-hexanediylimino(3,5,6-trifluoro-2,4-pyridinediyl)-(3'→5')-3'-O-dephosphinicothymidylyl(3,5,6-trifluoro-4,2-pyridinediyl)imino-1,6-hexanediylimino(3,5,6-trifluoro-2,4-pyridinediyl)-(3'→5')-3'-O-dephosphinicothymidylyl(3,5,6-trifluoro-4,2-pyridinediyl)imino-1,6-hexanediylimino(3,5,6-trifluoro-2,4-pyridinediyl)-(3'→5')-3'-O-(2,3,5,6-tetrafluoro-4-pyridinyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





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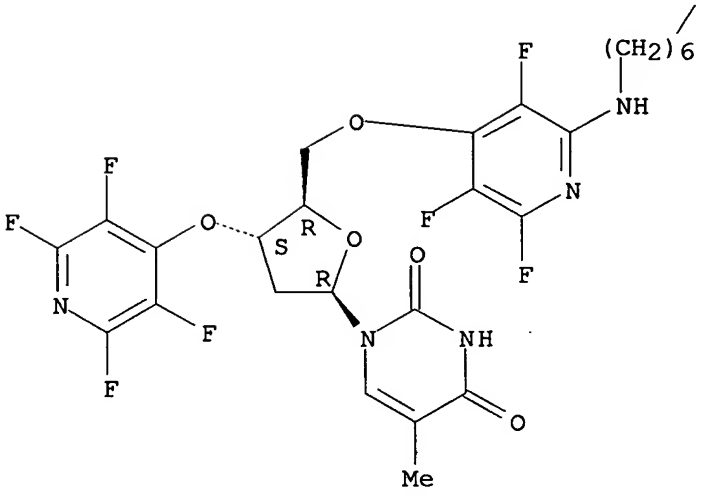

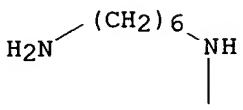

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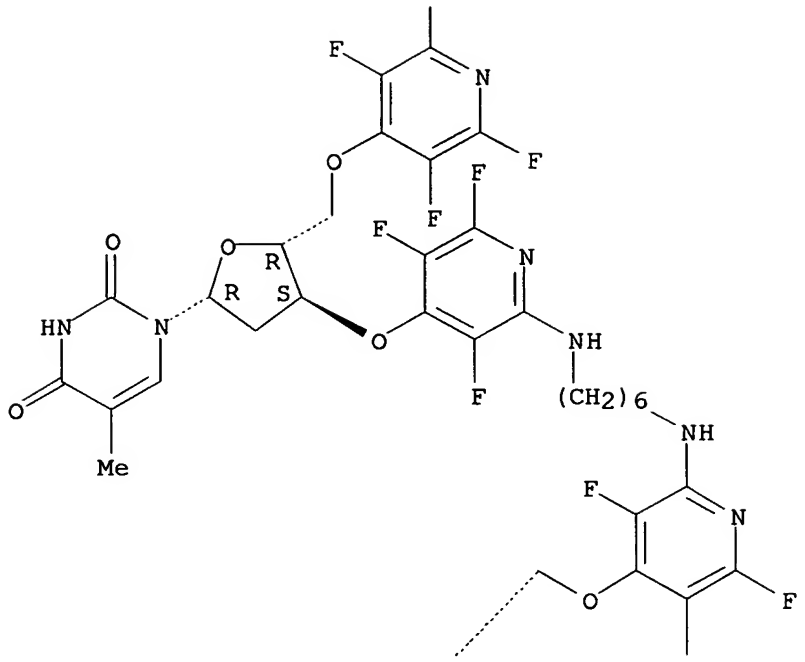

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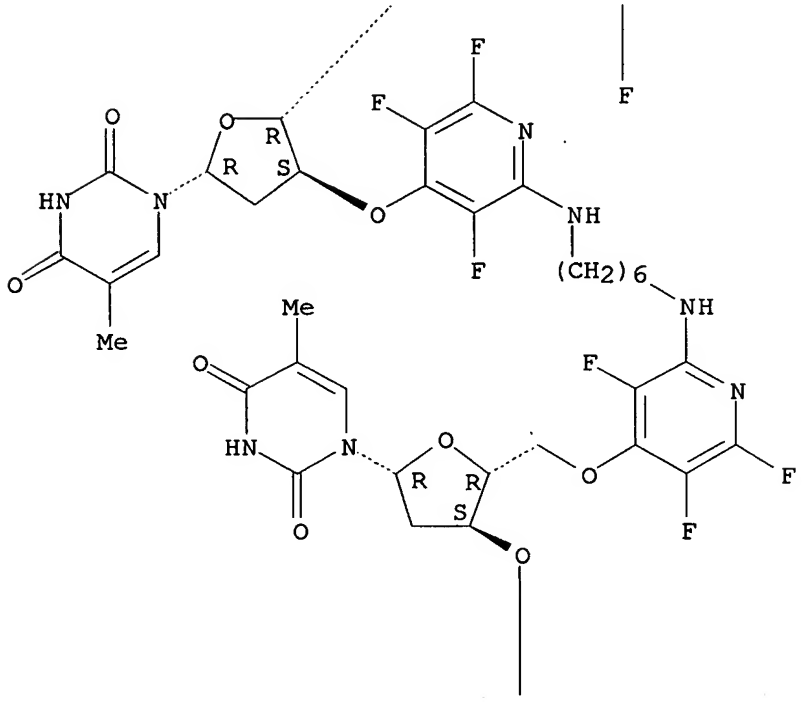

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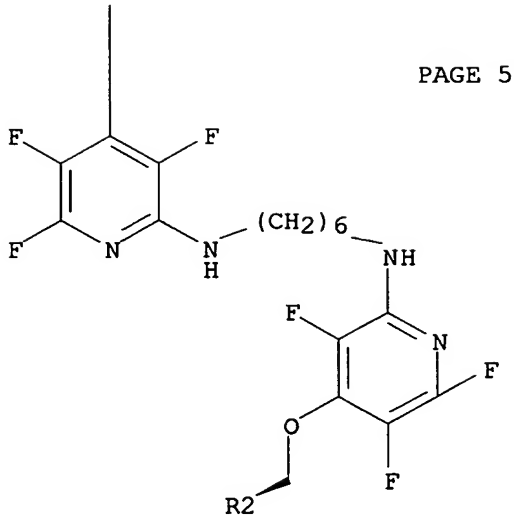


REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 5 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:182584 CAPLUS
DOCUMENT NUMBER: 140:235710
TITLE: Preparation of 2-(4-substituted-2-oxo-1,2-dihydropyridin-3-yl)-benzimidazoles as novel tyrosine kinase inhibitors
INVENTOR(S): Wittman, Mark D.; Balasubramanian, Neelakantan; Velaparthi, Upender; Zimmermann, Kurt; Saulnier, Mark G.; Liu, Peiying; Sang, Xiaopeng; Frennesson, David B.; Stoffan, Karen M.; Tarrant, James G.; Marinier, Anne; Roy, Stephan
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 210 pp., Cont.-in-part of U.S. Ser. No. 105,599.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 2004044203 | A1 | 20040304 | US 2002-263448 | 20021002 |
| WO 2004031401 | A2 | 20040415 | WO 2003-US30931 | 20031001 |
| WO 2004031401 | A3 | 20040729 | | |
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| US 2001-279327P | P | 20010328 |
| US 2002-105599 | A2 | 20020325 |
| US 2002-263448 | A | 20021002 |
| WO 2003-US30931 | W | 20031001 |

OTHER SOURCE(S): MARPAT 140:235710
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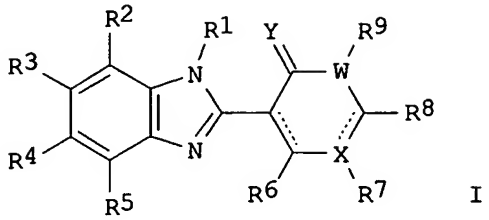

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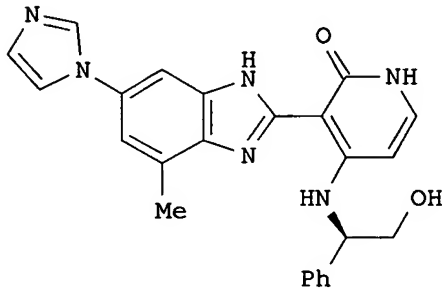


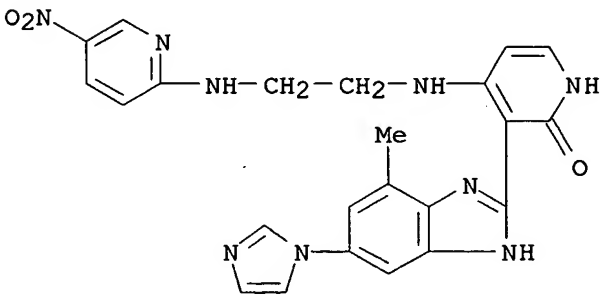
II

AB The title compds. [I; X = N, C, a bond, etc.; Y = O, S; W = N, C, O, S (if W = O or S, then R9 is absent); R1-R9 = H, alkyl, cycloalkyl, etc.] and their pharmaceutically acceptable salts which inhibit tyrosine kinase enzymes thereby making them useful as anti-cancer agents, were prepared Thus, reacting 3-[6-(imidazol-1-yl)-4-methyl-1H-benzimidazol-2-yl]-4-iodo-1H-pyridin-2-one (preparation given) with (S)-(-)-2-phenylglycinol in the presence of N-methylmorpholine in DMF afforded 52% (S)-II. The compds. I showed kinase activity of <25μM against one or more of the following kinases CDK, EMT, FAK, Her1, Her2, IGF, IR, LCK, MET, PDGF, VEGF. The compds. I are also useful for the treatment of other diseases which can be treated by inhibiting tyrosine kinase enzymes.

IT **468735-06-0P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 2-(4-substituted-2-oxo-1,2-dihydropyridin-3-yl)-benzimidazoles as novel tyrosine kinase inhibitors)

RN 468735-06-0 CAPLUS

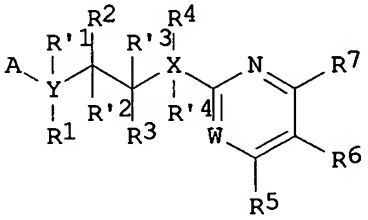
CN 2(1H)-Pyridinone, 3-[6-(1H-imidazol-1-yl)-4-methyl-1H-benzimidazol-2-yl]-4-[[2-[(5-nitro-2-pyridinyl)amino]ethyl]amino]- (9CI) (CA INDEX NAME)



L13 ANSWER 6 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:719320 CAPLUS
DOCUMENT NUMBER: 139:240364
TITLE: Glycogen synthase kinase 3 inhibitors for the treatment of ischemia
INVENTOR(S): Harrison, Stephen D.; Wagman, Allan S.; Martin, Kathleen A.
PATENT ASSIGNEE(S): Chiron Corporation, USA
SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| WO 2003074072 | A1 | 20030912 | WO 2003-US6742 | | 20030303 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | | |
| AU 2003220026 | A1 | 20030916 | AU 2003-220026 | | 20030303 |
| EP 1490093 | A1 | 20041229 | EP 2003-716314 | | 20030303 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | | |
| CN 1649616 | A | 20050803 | CN 2003-809261 | | 20030303 |
| JP 2005525362 | T2 | 20050825 | JP 2003-572588 | | 20030303 |
| US 2005203059 | A1 | 20050915 | US 2005-506570 | | 20050429 |
| PRIORITY APPLN. INFO.: | | | US 2002-361417P | P | 20020301 |
| | | | WO 2003-US6742 | W | 20030303 |

OTHER SOURCE(S): MARPAT 139:240364
GI



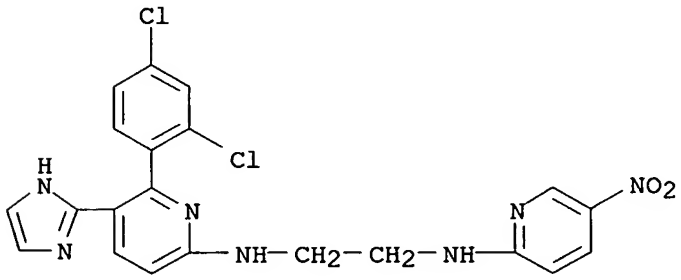
I

AB Methods and compns. are provided for the prophylaxis or inhibition of cerebral ischemic injury by administration of an inhibitor of glycogen synthase kinase 3 (GSK3) activity, either alone or in combination with at least one addnl. agent for the treatment of ischemic stroke. Screening

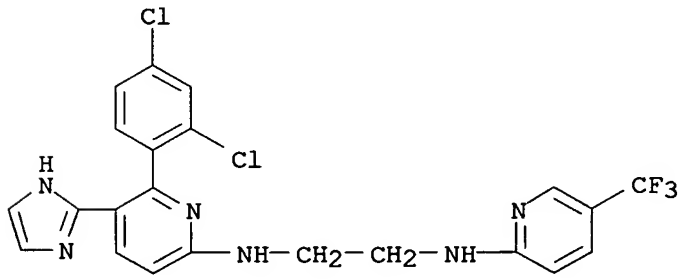
data are given for GSK3 inhibitor EC50 values for a number of compds. such as I.

IT **252936-05-3 252942-40-8 596112-65-1**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(glycogen synthase kinase 3 inhibitors for the treatment of ischemia)

RN 252936-05-3 CAPLUS
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)

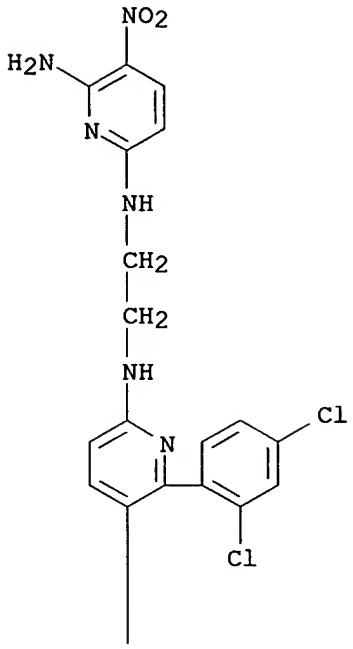


RN 252942-40-8 CAPLUS
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-[5-(trifluoromethyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)

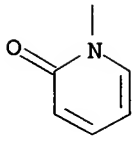


RN 596112-65-1 CAPLUS
CN [1(2H),3'-Bipyridin]-2-one, 6'-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2'-(2,4-dichlorophenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A




PAGE 2-A



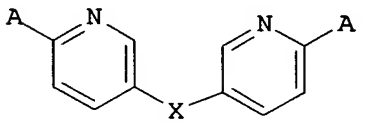

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 7 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:22855 CAPLUS
DOCUMENT NUMBER: 138:89831
TITLE: Preparation of bis(2-aryl-5-pyridyl)diamine derivatives as inhibitors of IgE antibody production
INVENTOR(S): Ishiwata, Hiroyuki; Sato, Seiichi; Kabeya, Mototsugu; Oda, Soichi; Suda, Makoto; Shibasaki, Manabu
PATENT ASSIGNEE(S): Kowa Co., Ltd., Japan
SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003002538 | A1 | 20030109 | WO 2002-JP6493 | 20020627 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 2003022886 | A1 | 20030130 | US 2001-893680 | 20010629 |
| US 6890940 | B2 | 20050510 | | |
| EP 1403251 | A1 | 20040331 | EP 2002-738821 | 20020627 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |

PRIORITY APPLN. INFO.: US 2001-893680 A 20010629
WO 2002-JP6493 W 20020627

OTHER SOURCE(S): MARPAT 138:89831
GI



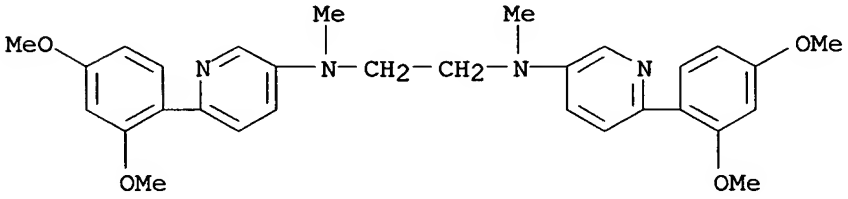
I

AB The title compds. I [A represents an optionally substituted aromatic hydrocarbon group and X represents a group such as R2N(CH2)pZ(CH2)qNR3, etc.; R2 and R3 each represents hydrogen or lower alkyl; Z represents a single bond, substituted methylene, substituted imino, oxygen, or cycloalkylene; p and q each is a number of 0 to 6] are prepared I are useful in the treatment of allergic immune diseases. N,N'-bis[2-(4-hydroxy-3,5-dimethoxyphenyl)-5-pyridyl]-N,N'-dimethylethylenediamine 2MeSO3H salt in vitro showed IC50 of 0.04 μM in a test for inhibiting the production of IgE antibody in mouse spleen cells.

IT **483987-82-2P 483987-83-3P 483987-84-4P**
**483987-85-5P 483987-86-6P 483987-87-7P**
**483987-88-8P 483987-89-9P 483987-90-2P**
**483987-91-3P 483987-92-4P 483987-93-5P**

**483987-94-6P 483987-95-7P 483987-96-8P**
**483987-97-9P 483987-98-0P 483987-99-1P**
**483988-00-7P 483988-01-8P 483988-02-9P**
**483988-03-0P 483988-04-1P 483988-06-3P**
**483988-08-5P 483988-09-6P 483988-10-9P**
**483988-11-0P 483988-12-1P 483988-13-2P**
**483988-14-3P 483988-15-4P 483988-16-5P**
**483988-17-6P 483988-18-7P 483988-19-8P**
**483988-20-1P 483988-21-2P 483988-22-3P**
**483988-23-4P 483988-24-5P 483988-25-6P**
**483988-26-7P 483988-28-9P 483988-29-0P**
**483988-30-3P 483988-31-4P 483988-38-1P**
**483988-41-6P 483988-42-7P 483988-43-8P**
**483988-44-9P 483988-45-0P 483988-46-1P**
**483988-64-3P 483988-65-4P 483988-66-5P**
**483988-67-6P 483988-68-7P 483988-69-8P**
**483988-70-1P 483988-71-2P 483988-72-3P**
**483988-73-4P 483988-74-5P 483988-75-6P**
**483988-76-7P 483988-77-8P 483988-78-9P**
**483988-79-0P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of bis(2-aryl-5-pyridyl)diamine derivs. as inhibitors of IgE antibody production)

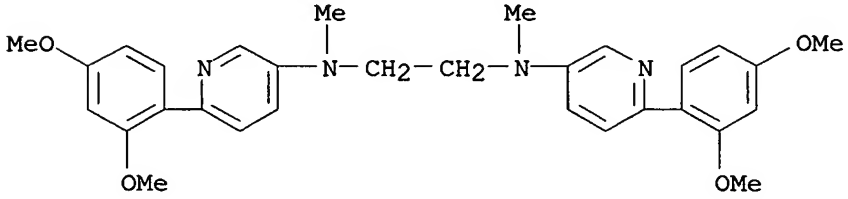
RN 483987-82-2 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(2,4-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)




RN 483987-83-3 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(2,4-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

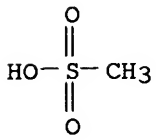
CM 1

CRN 483987-82-2
CMF C30 H34 N4 O4

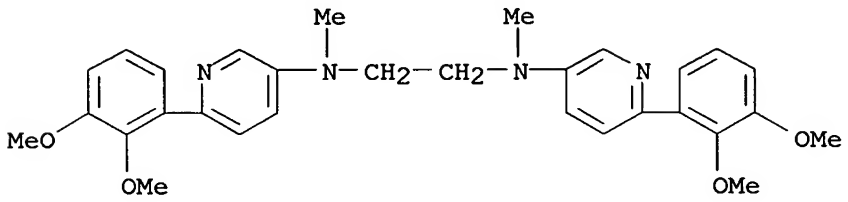


CM 2

CRN 75-75-2
CMF C H4 O3 S



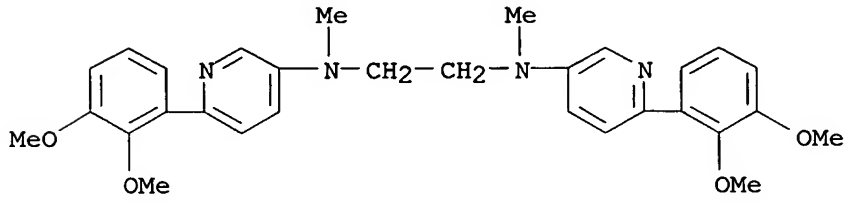
RN 483987-84-4 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(2,3-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483987-85-5 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(2,3-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

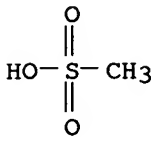
CM 1

CRN 483987-84-4
CMF C30 H34 N4 O4

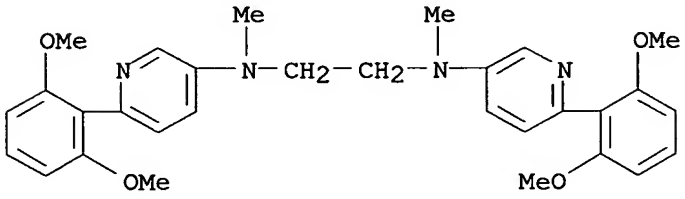


CM 2

CRN 75-75-2
CMF C H4 O3 S



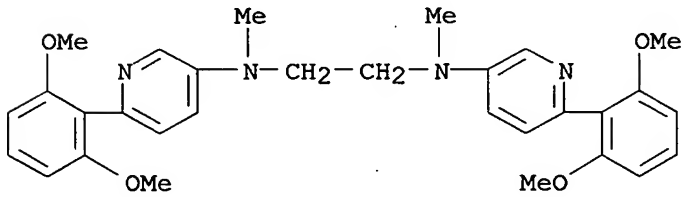
RN 483987-86-6 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(2,6-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483987-87-7 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(2,6-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

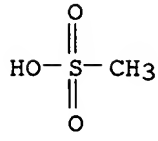
CM 1

CRN 483987-86-6
CMF C30 H34 N4 O4

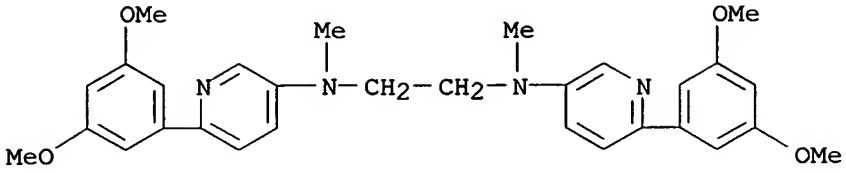


CM 2

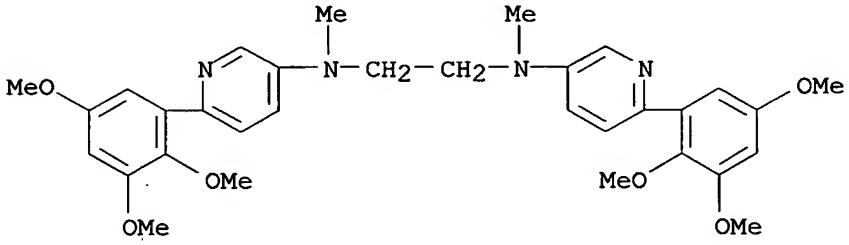
CRN 75-75-2
CMF C H4 O3 S



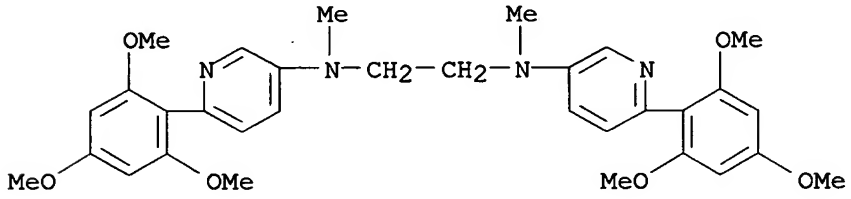
RN 483987-88-8 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483987-89-9 CAPLUS
CN 1,2-Ethanediamine, N,N'-dimethyl-N,N'-bis[6-(2,3,5-trimethoxyphenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



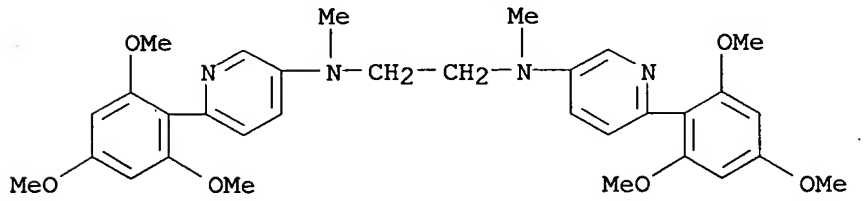
RN 483987-90-2 CAPLUS
CN 1,2-Ethanediamine, N,N'-dimethyl-N,N'-bis[6-(2,4,6-trimethoxyphenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



RN 483987-91-3 CAPLUS
CN 1,2-Ethanediamine, N,N'-dimethyl-N,N'-bis[6-(2,4,6-trimethoxyphenyl)-3-pyridinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

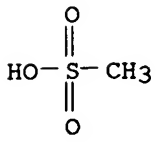
CM 1

CRN 483987-90-2
CMF C32 H38 N4 O6

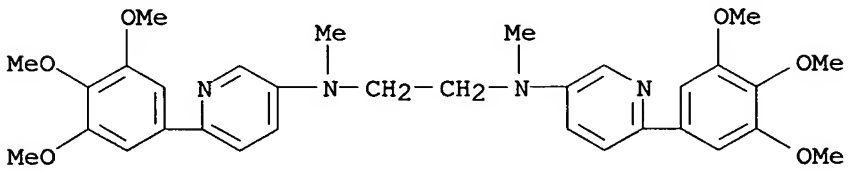


CM 2

CRN 75-75-2
CMF C H4 O3 S



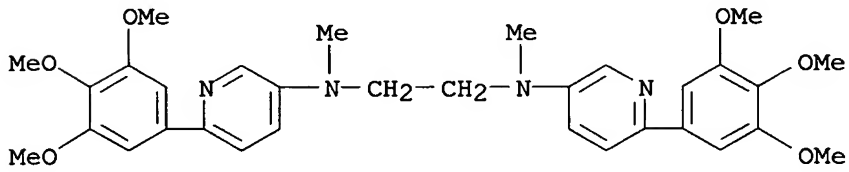
RN 483987-92-4 CAPLUS
CN 1,2-Ethanediamine, N,N'-dimethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



RN 483987-93-5 CAPLUS
CN 1,2-Ethanediamine, N,N'-dimethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

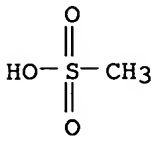
CM 1

CRN 483987-92-4
CMF C32 H38 N4 O6

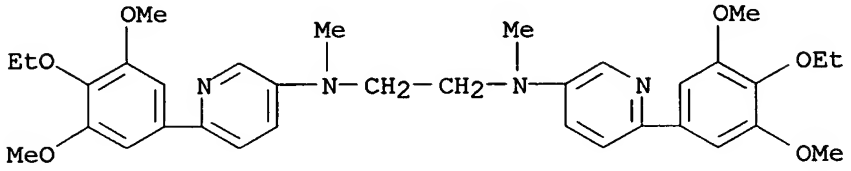


CM 2

CRN 75-75-2
CMF C H4 O3 S



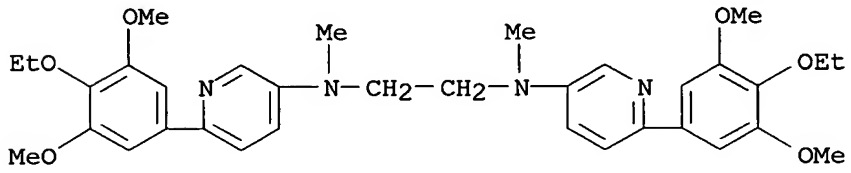
RN 483987-94-6 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(4-ethoxy-3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483987-95-7 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(4-ethoxy-3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

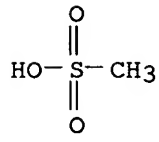
CM 1

CRN 483987-94-6
CMF C34 H42 N4 O6

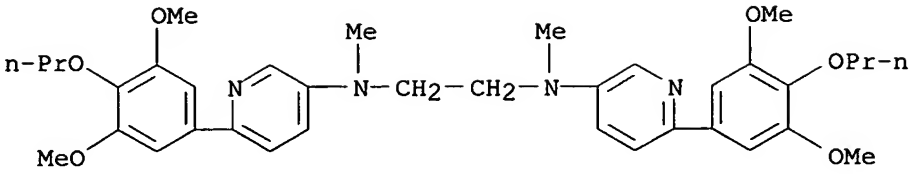


CM 2

CRN 75-75-2
CMF C H4 O3 S



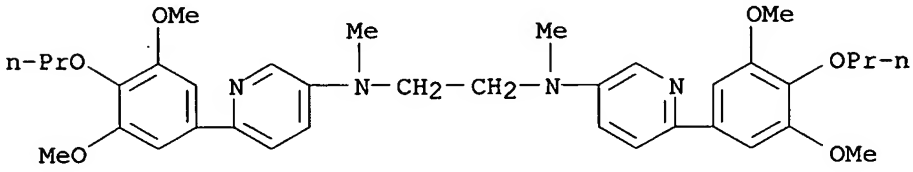
RN 483987-96-8 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(3,5-dimethoxy-4-propoxyphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483987-97-9 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(3,5-dimethoxy-4-propoxyphenyl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

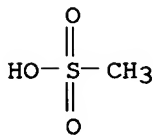
CM 1

CRN 483987-96-8
CMF C36 H46 N4 O6

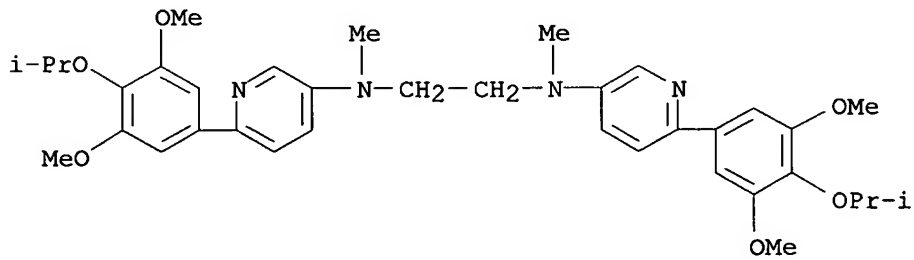


CM 2

CRN 75-75-2
CMF C H4 O3 S



RN 483987-98-0 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(1-methylethoxy)phenyl]-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)

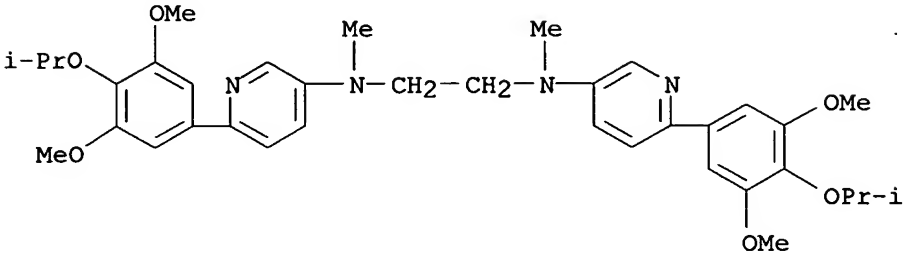


RN 483987-99-1 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(1-methylethoxy)phenyl]-3-

pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

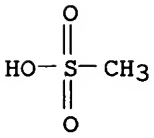
CM 1

CRN 483987-98-0
CMF C36 H46 N4 O6



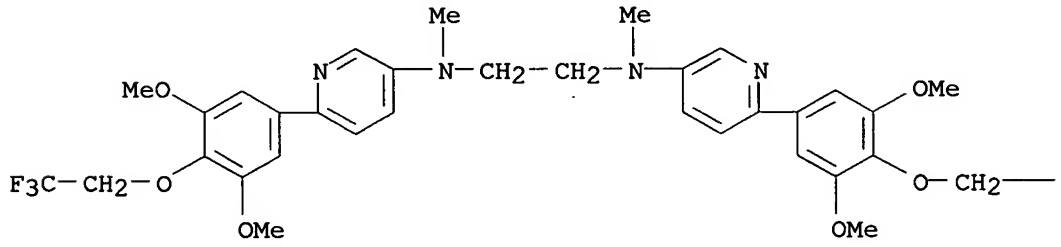
CM 2

CRN 75-75-2
CMF C H4 O3 S



RN 483988-00-7 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(2,2,2-trifluoroethoxy)phenyl]-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

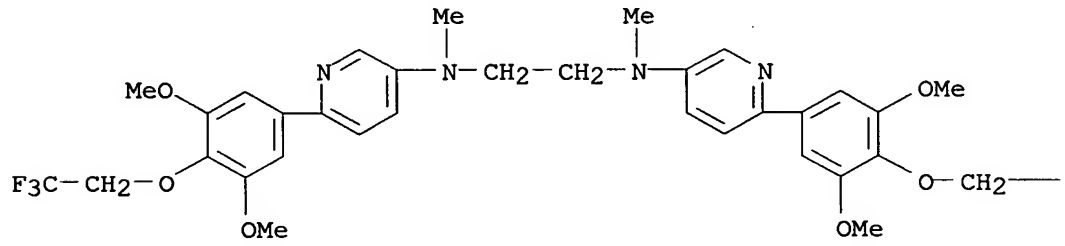
—$CF_3$

RN 483988-01-8 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(2,2,2-trifluoroethoxy)phenyl]-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 483988-00-7
CMF C34 H36 F6 N4 O6

PAGE 1-A

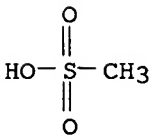



PAGE 1-B

—$CF_3$

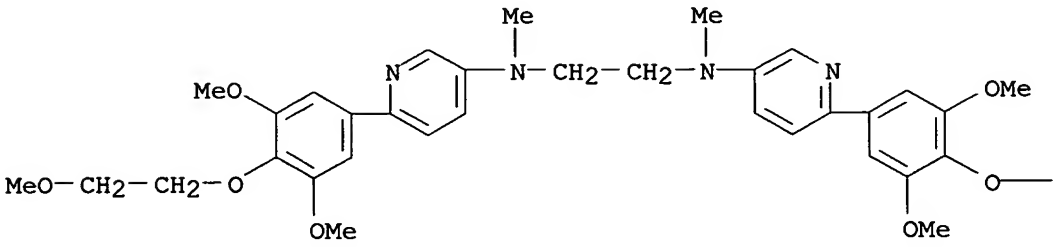
CM 2

CRN 75-75-2
CMF C H4 O3 S



RN 483988-02-9 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(2-methoxyethoxy)phenyl]-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

— $CH_2$— $CH_2$— OMe

RN 483988-03-0 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(2-methoxyethoxy)phenyl]-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 483988-02-9
CMF C36 H46 N4 O8

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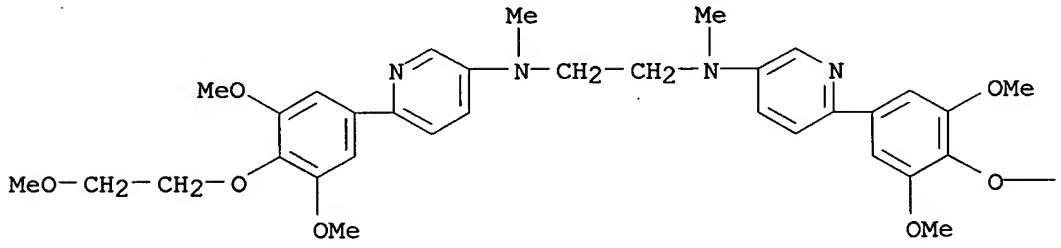
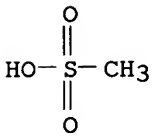


PAGE 1-B



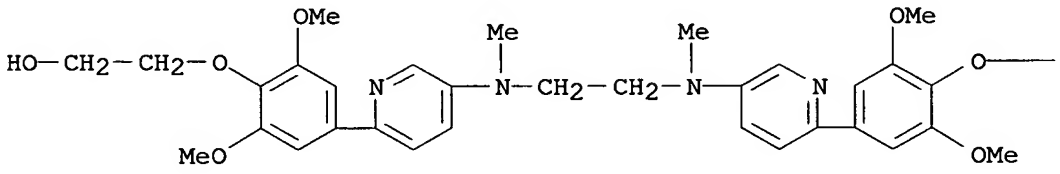
CM 2

CRN 75-75-2
CMF C H4 O3 S

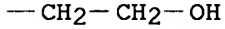


RN 483988-04-1 CAPLUS
CN Ethanol, 2,2'-[1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl(2,6-dimethoxy-4,1-phenylene)oxy]]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



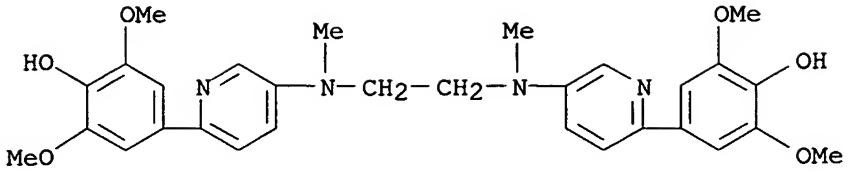
PAGE 1-B



RN 483988-06-3 CAPLUS
CN Phenol, 4,4'-[1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl]]bis[2,6-dimethoxy-, dimethanesulfonate (salt) (9CI) (CA INDEX NAME)

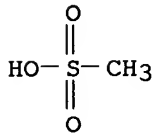
CM 1

CRN 483988-05-2
CMF C30 H34 N4 O6



CM 2

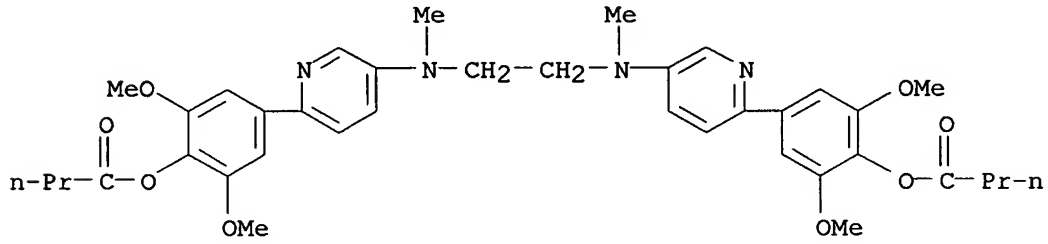
CRN 75-75-2
CMF C H4 O3 S



RN 483988-08-5 CAPLUS
CN Butanoic acid, 1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl(2,6-dimethoxy-4,1-phenylene)] ester, dimethanesulfonate (9CI) (CA INDEX NAME)

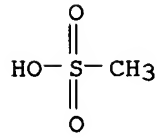
CM 1

CRN 483988-07-4
CMF C38 H46 N4 O8

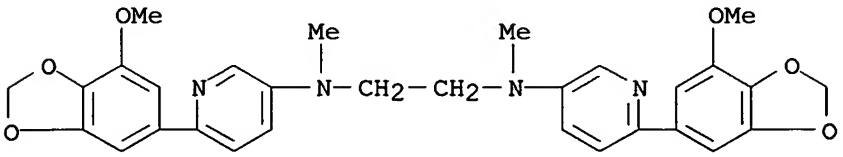


CM 2

CRN 75-75-2
CMF C H4 O3 S



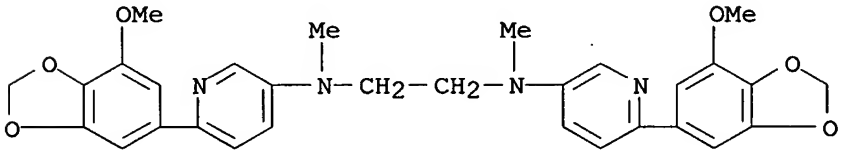
RN 483988-09-6 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(7-methoxy-1,3-benzodioxol-5-yl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483988-10-9 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(7-methoxy-1,3-benzodioxol-5-yl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

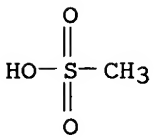
CM 1

CRN 483988-09-6
CMF C30 H30 N4 O6

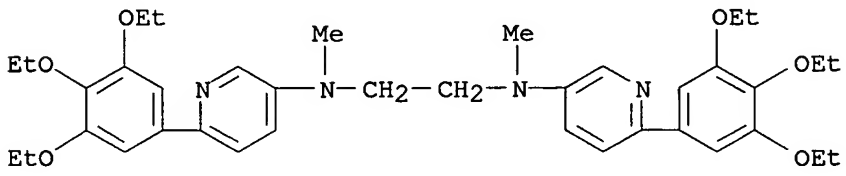


CM 2

CRN 75-75-2
CMF C H4 O3 S



RN 483988-11-0 CAPLUS
CN 1,2-Ethanediamine, N,N'-dimethyl-N,N'-bis[6-(3,4,5-triethoxyphenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)

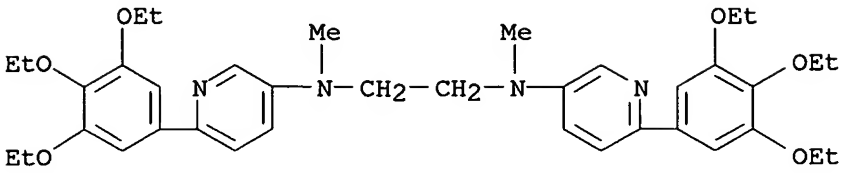


RN 483988-12-1 CAPLUS
CN 1,2-Ethanediamine, N,N'-dimethyl-N,N'-bis[6-(3,4,5-triethoxyphenyl)-3-

pyridinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

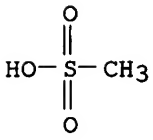
CM 1

CRN 483988-11-0
CMF C38 H50 N4 O6

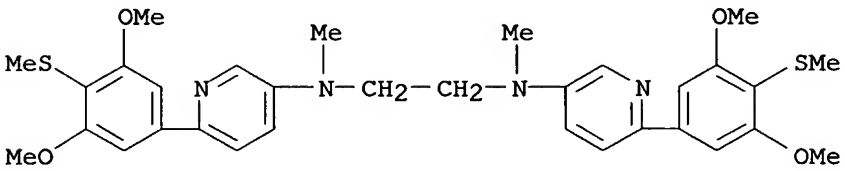


CM 2

CRN 75-75-2
CMF C H4 O3 S



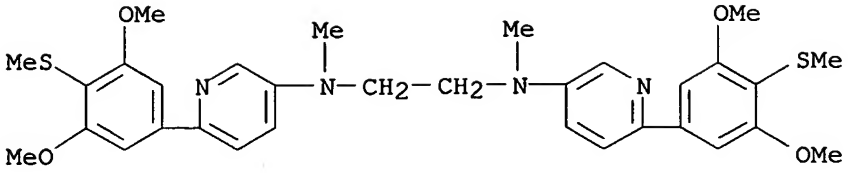
RN 483988-13-2 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(methylthio)phenyl]-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483988-14-3 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(methylthio)phenyl]-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

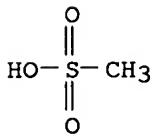
CM 1

CRN 483988-13-2
CMF C32 H38 N4 O4 S2

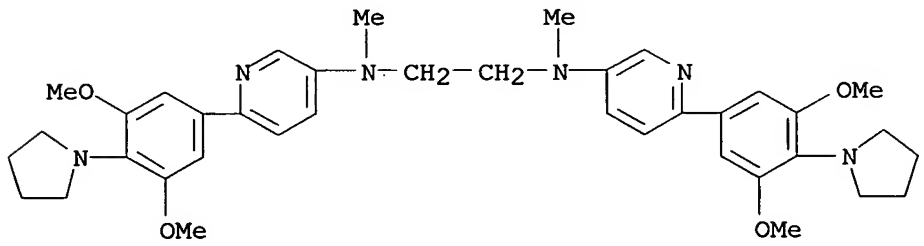


CM 2

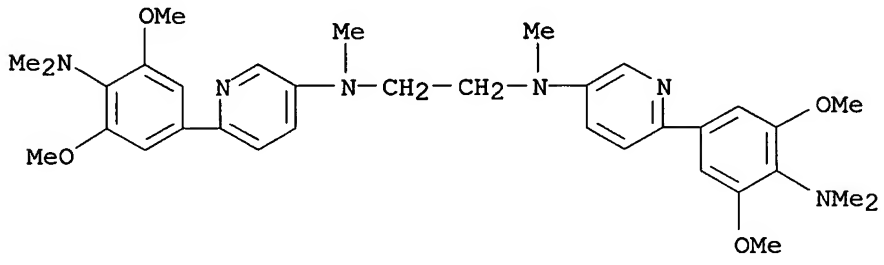
CRN 75-75-2
CMF C H4 O3 S



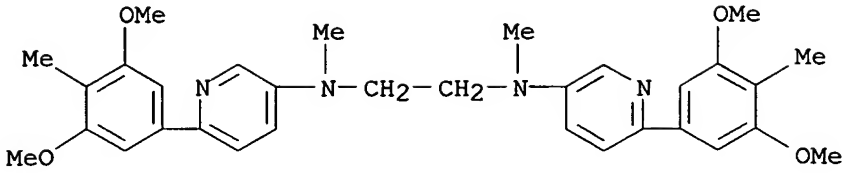
RN 483988-15-4 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(1-pyrrolidinyl)phenyl]-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483988-16-5 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-[4-(dimethylamino)-3,5-dimethoxyphenyl]-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



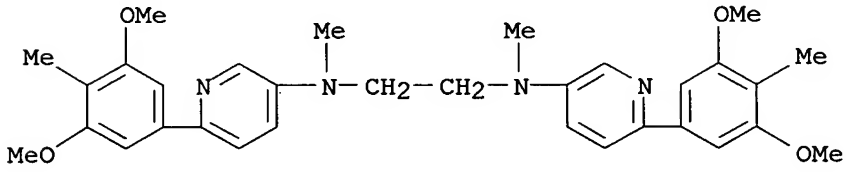
RN 483988-17-6 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(3,5-dimethoxy-4-methylphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483988-18-7 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(3,5-dimethoxy-4-methylphenyl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

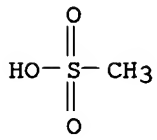
CM 1

CRN 483988-17-6
CMF C32 H38 N4 O4

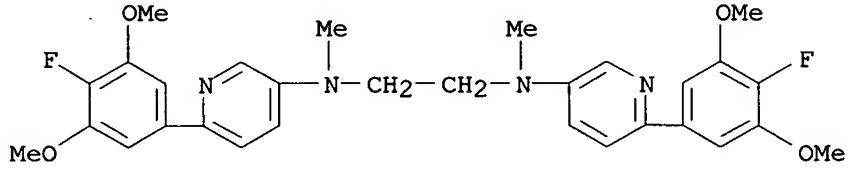


CM 2

CRN 75-75-2
CMF C H4 O3 S



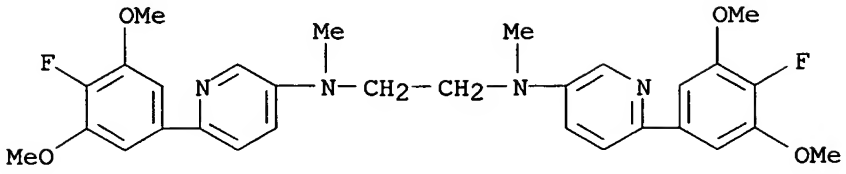
RN 483988-19-8 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(4-fluoro-3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483988-20-1 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(4-fluoro-3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

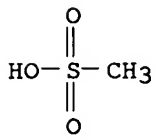
CM 1

CRN 483988-19-8
CMF C30 H32 F2 N4 O4

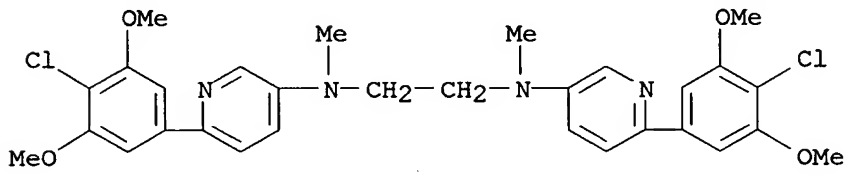


CM 2

CRN 75-75-2
CMF C H4 O3 S



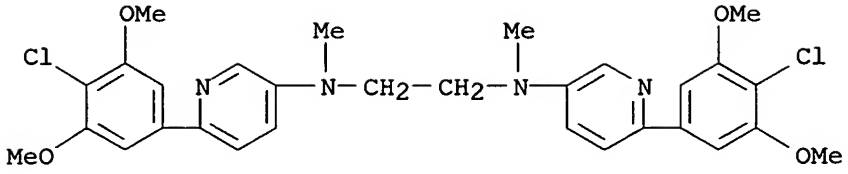
RN 483988-21-2 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(4-chloro-3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483988-22-3 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(4-chloro-3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

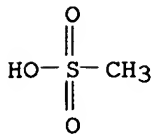
CM 1

CRN 483988-21-2
CMF C30 H32 Cl2 N4 O4

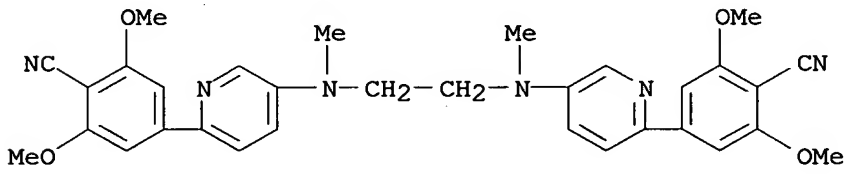


CM 2

CRN 75-75-2
CMF C H4 O3 S



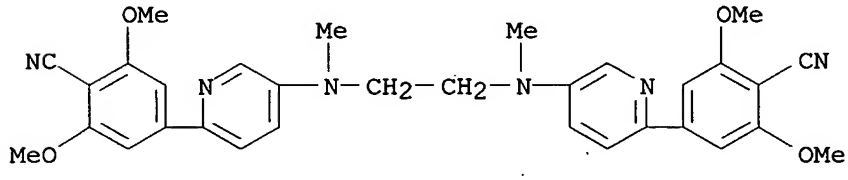
RN 483988-23-4 CAPLUS
CN Benzonitrile, 4,4'-[1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl]]bis[2,6-dimethoxy- (9CI) (CA INDEX NAME)



RN 483988-24-5 CAPLUS
CN Benzonitrile, 4,4'-[1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl]]bis[2,6-dimethoxy-, dimethanesulfonate (9CI) (CA INDEX NAME)

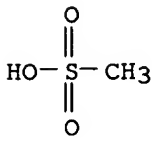
CM 1

CRN 483988-23-4
CMF C32 H32 N6 O4

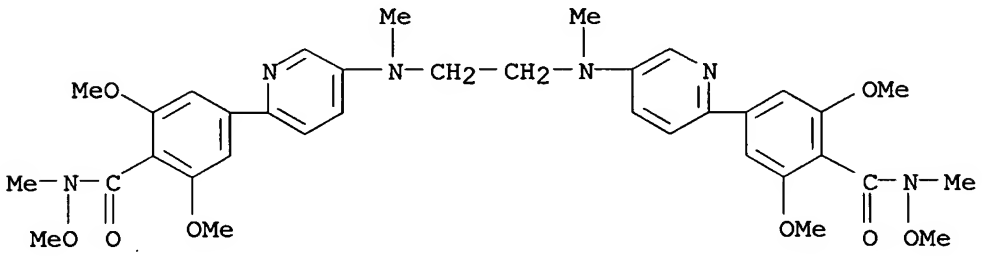


CM 2

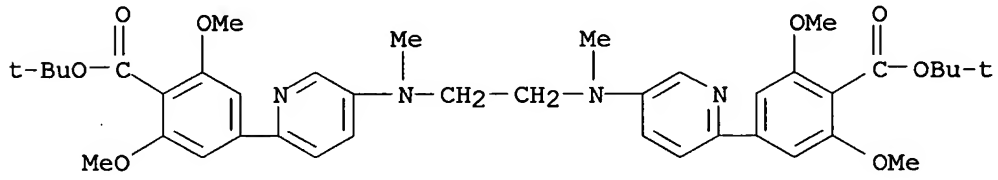
CRN 75-75-2
CMF C H4 O3 S



RN 483988-25-6 CAPLUS
CN Benzamide, 4,4'-[1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl]]bis[N,2,6-trimethoxy-N-methyl- (9CI) (CA INDEX NAME)



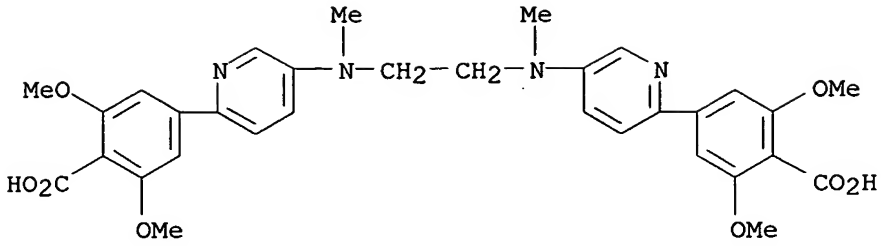
RN 483988-26-7 CAPLUS
CN Benzoic acid, 4,4'-[1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl]]bis[2,6-dimethoxy-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



RN 483988-28-9 CAPLUS
CN Benzoic acid, 4,4'-[1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl]]bis[2,6-dimethoxy-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

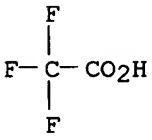
CM 1

CRN 483988-27-8
CMF C32 H34 N4 O8

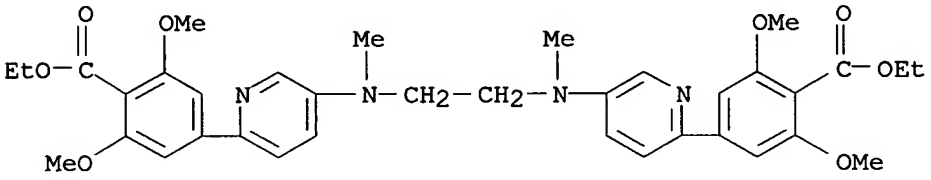


CM 2

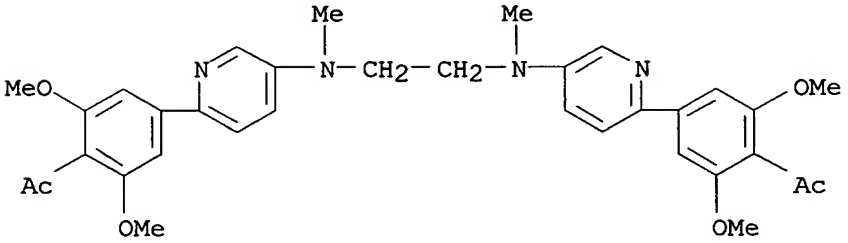
CRN 76-05-1
CMF C2 H F3 O2



RN 483988-29-0 CAPLUS
CN Benzoic acid, 4,4'-[1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl]]bis[2,6-dimethoxy-, diethyl ester (9CI) (CA INDEX NAME)



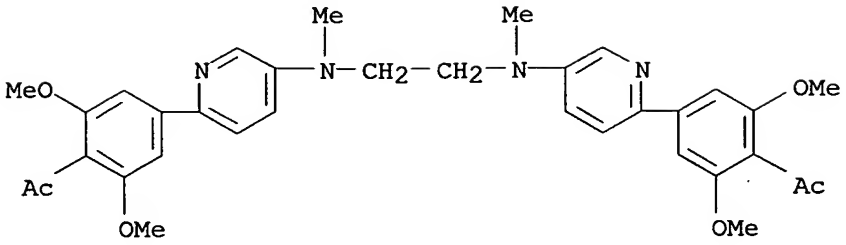
RN 483988-30-3 CAPLUS
CN Ethanone, 1,1'-[1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl(2,6-dimethoxy-4,1-phenylene)]]bis- (9CI) (CA INDEX NAME)



RN 483988-31-4 CAPLUS
CN Ethanone, 1,1'-[1,2-ethanediylbis[(methylimino)-5,2-pyridinediyl(2,6-dimethoxy-4,1-phenylene)]]bis-, dimethanesulfonate (9CI) (CA INDEX NAME)

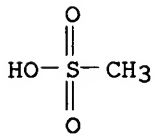
CM 1

CRN 483988-30-3
CMF C34 H38 N4 O6

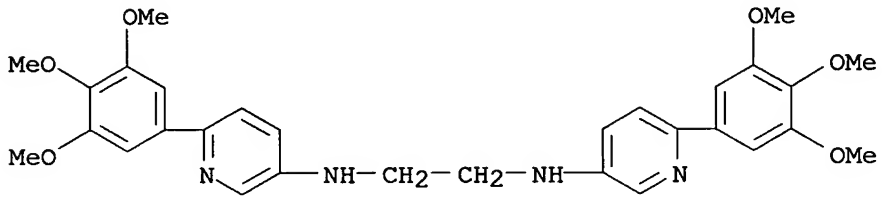


CM 2

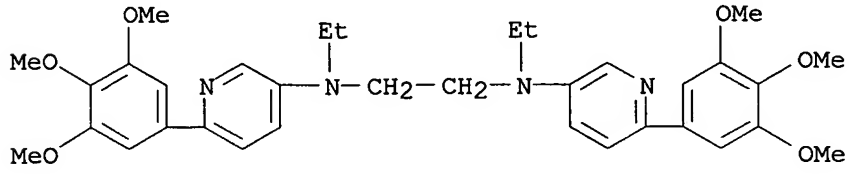
CRN 75-75-2
CMF C H4 O3 S



RN 483988-38-1 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



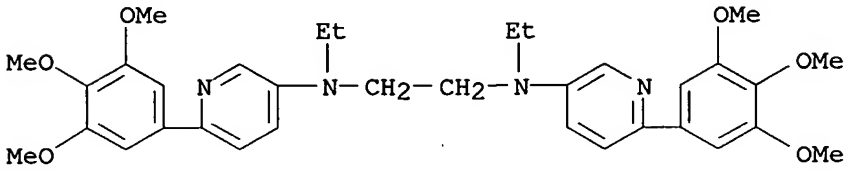
RN 483988-41-6 CAPLUS
CN 1,2-Ethanediamine, N,N'-diethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



RN 483988-42-7 CAPLUS
CN 1,2-Ethanediamine, N,N'-diethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

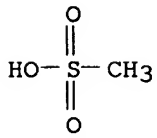
CM 1

CRN 483988-41-6
CMF C34 H42 N4 O6

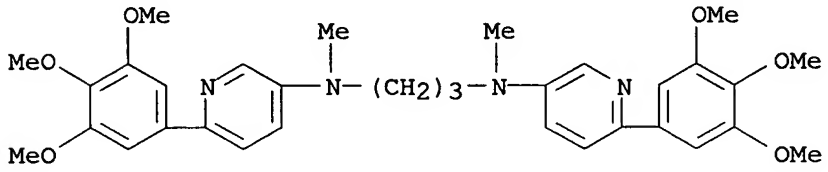


CM 2

CRN 75-75-2
CMF C H4 O3 S



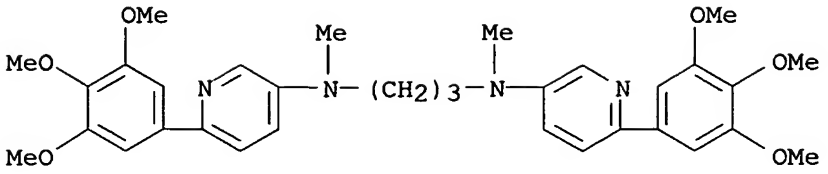
RN 483988-43-8 CAPLUS
CN 1,3-Propanediamine, N,N'-dimethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



RN 483988-44-9 CAPLUS
CN 1,3-Propanediamine, N,N'-dimethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

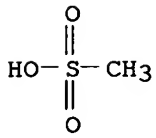
CM 1

CRN 483988-43-8
CMF C33 H40 N4 O6

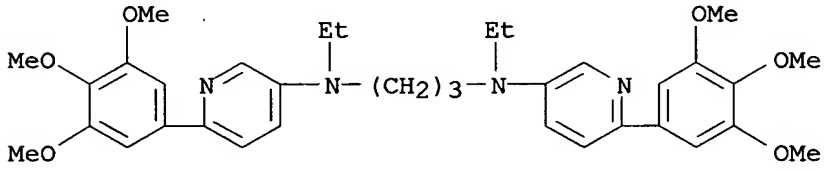


CM 2

CRN 75-75-2
CMF C H4 O3 S



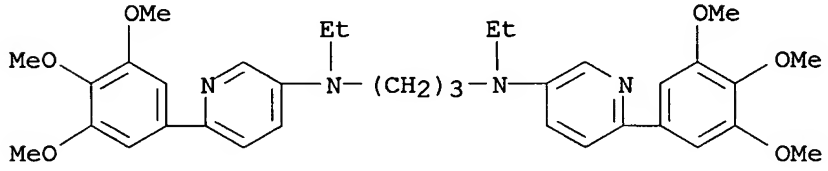
RN 483988-45-0 CAPLUS
CN 1,3-Propanediamine, N,N'-diethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



RN 483988-46-1 CAPLUS
CN 1,3-Propanediamine, N,N'-diethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

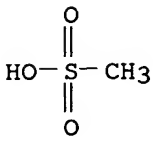
CRN 483988-45-0
CMF C35 H44 N4 O6



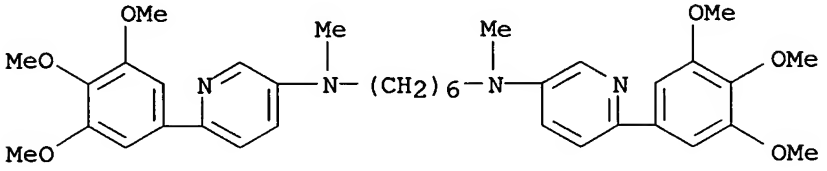
CM 2

CRN 75-75-2

CMF C H4 O3 S



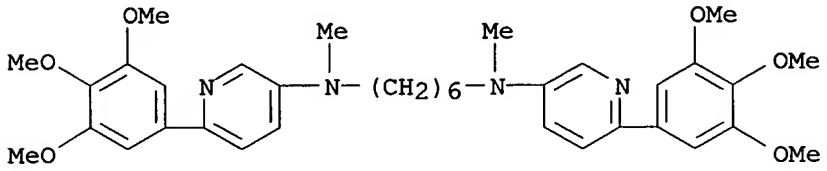
RN 483988-64-3 CAPLUS
CN 1,6-Hexanediamine, N,N'-dimethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



RN 483988-65-4 CAPLUS
CN 1,6-Hexanediamine, N,N'-dimethyl-N,N'-bis[6-(3,4,5-trimethoxyphenyl)-3-pyridinyl]-, dimethanesulfonate (9CI) (CA INDEX NAME)

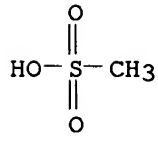
CM 1

CRN 483988-64-3
CMF C36 H46 N4 O6

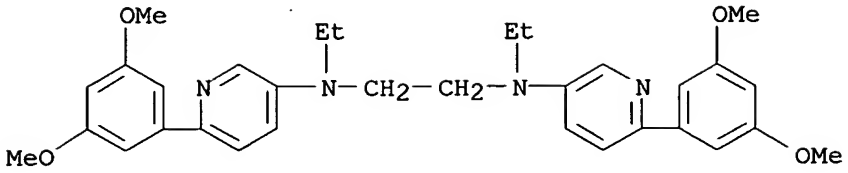


CM 2

CRN 75-75-2
CMF C H4 O3 S



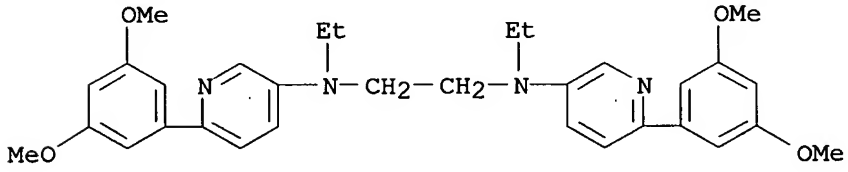
RN 483988-66-5 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-diethyl- (9CI) (CA INDEX NAME)



RN 483988-67-6 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-(3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-diethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

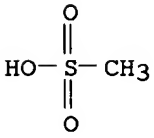
CM 1

CRN 483988-66-5
CMF C32 H38 N4 O4

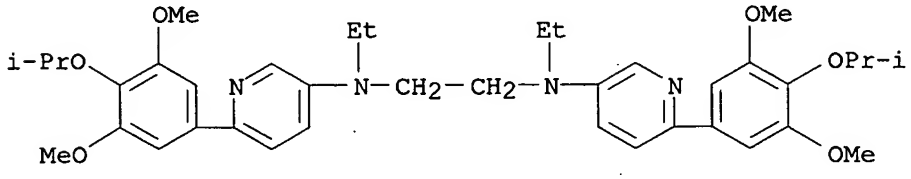


CM 2

CRN 75-75-2
CMF C H4 O3 S



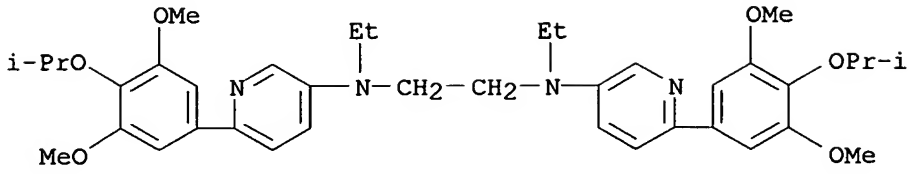
RN 483988-68-7 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(1-methylethoxy)phenyl]-3-pyridinyl]-N,N'-diethyl- (9CI) (CA INDEX NAME)



RN 483988-69-8 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(1-methylethoxy)phenyl]-3-pyridinyl]-N,N'-diethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

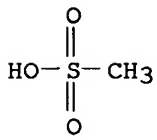
CM 1

CRN 483988-68-7
CMF C38 H50 N4 O6

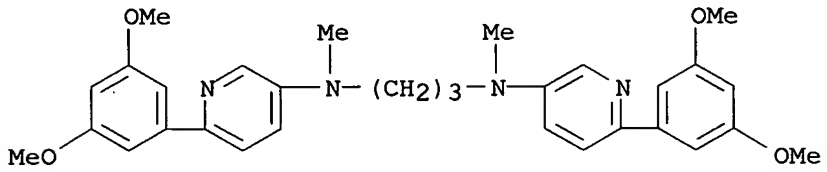


CM 2

CRN 75-75-2
CMF C H4 O3 S



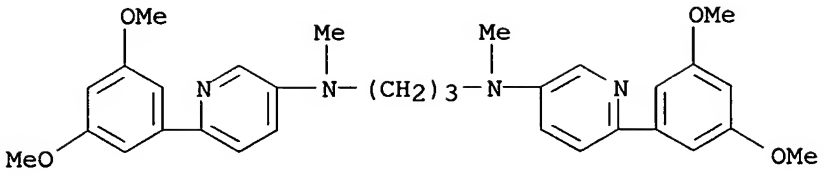
RN 483988-70-1 CAPLUS
CN 1,3-Propanediamine, N,N'-bis[6-(3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483988-71-2 CAPLUS
CN 1,3-Propanediamine, N,N'-bis[6-(3,5-dimethoxyphenyl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

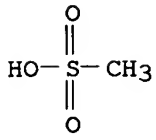
CM 1

CRN 483988-70-1
CMF C31 H36 N4 O4

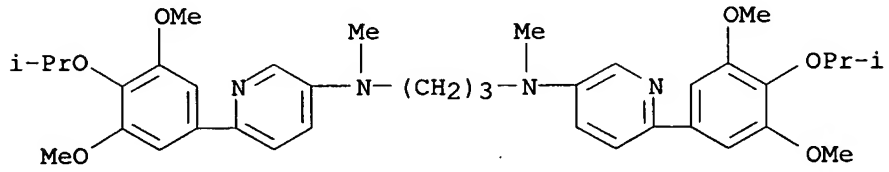


CM 2

CRN 75-75-2
CMF C H4 O3 S



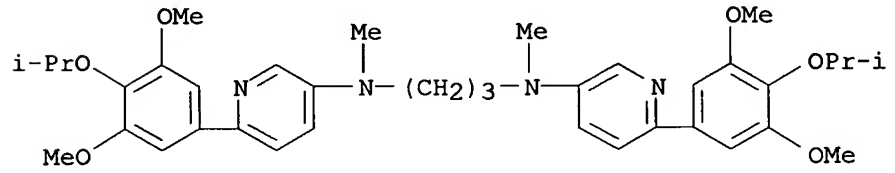
RN 483988-72-3 CAPLUS
CN 1,3-Propanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(1-methylethoxy)phenyl]-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483988-73-4 CAPLUS
CN 1,3-Propanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(1-methylethoxy)phenyl]-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

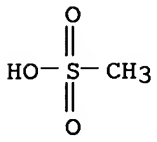
CRN 483988-72-3
CMF C37 H48 N4 O6



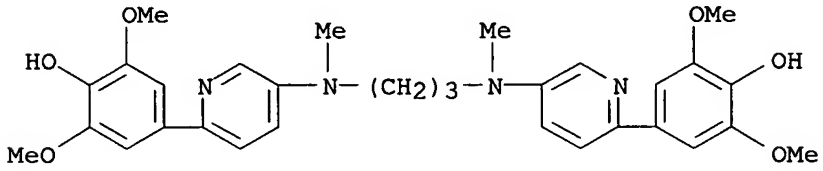
CM 2

CRN 75-75-2

CMF C H4 O3 S



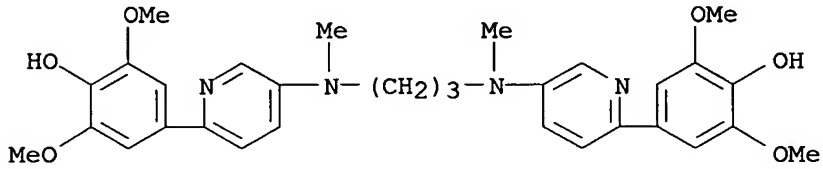
RN 483988-74-5 CAPLUS
CN Phenol, 4,4'-[1,3-propanediylbis[(methylimino)-5,2-pyridinediyl]]bis[2,6-dimethoxy- (9CI) (CA INDEX NAME)



RN 483988-75-6 CAPLUS
CN Phenol, 4,4'-[1,3-propanediylbis[(methylimino)-5,2-pyridinediyl]]bis[2,6-dimethoxy-, dimethanesulfonate (salt) (9CI) (CA INDEX NAME)

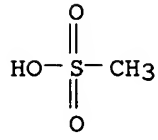
CM 1

CRN 483988-74-5
CMF C31 H36 N4 O6

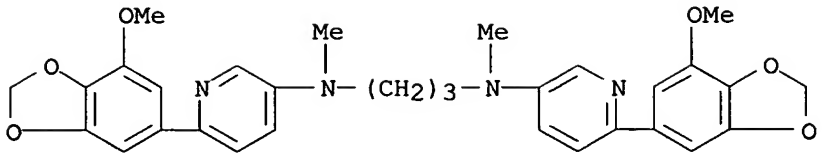


CM 2

CRN 75-75-2
CMF C H4 O3 S



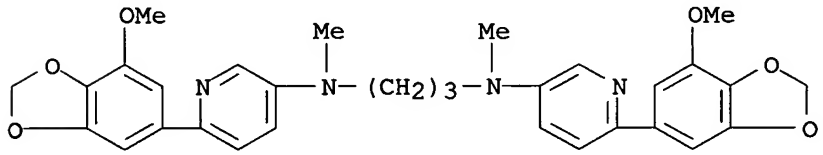
RN 483988-76-7 CAPLUS
CN 1,3-Propanediamine, N,N'-bis[6-(7-methoxy-1,3-benzodioxol-5-yl)-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)



RN 483988-77-8 CAPLUS
CN 1,3-Propanediamine, N,N'-bis[6-(7-methoxy-1,3-benzodioxol-5-yl)-3-pyridinyl]-N,N'-dimethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

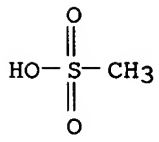
CM 1

CRN 483988-76-7
CMF C31 H32 N4 O6

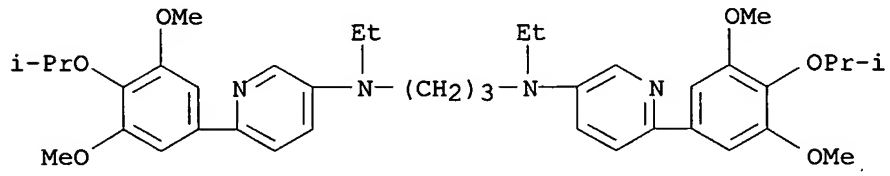


CM 2

CRN 75-75-2
CMF C H4 O3 S



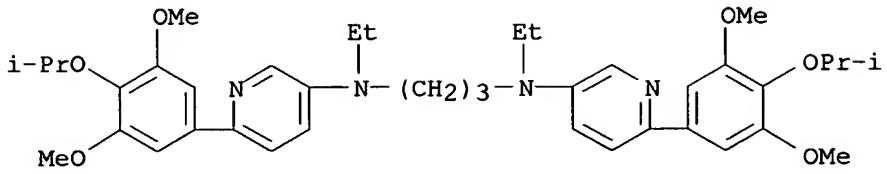
RN 483988-78-9 CAPLUS
CN 1,3-Propanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(1-methylethoxy)phenyl]-3-pyridinyl]-N,N'-diethyl- (9CI) (CA INDEX NAME)



RN 483988-79-0 CAPLUS
CN 1,3-Propanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(1-methylethoxy)phenyl]-3-pyridinyl]-N,N'-diethyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 483988-78-9
CMF C39 H52 N4 O6



CM 2

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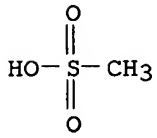
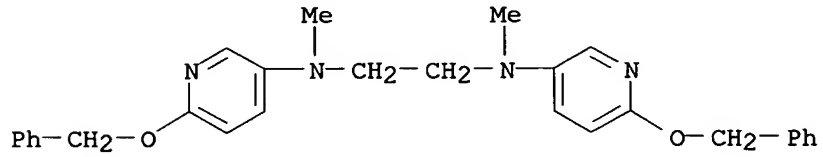
CMF C H4 O3 S



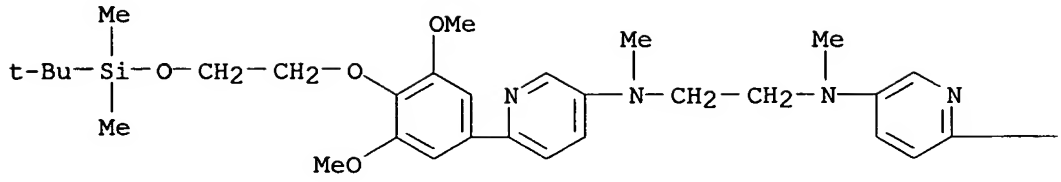
IT **483988-85-8P 483989-15-7P 483989-16-8P**
**483989-22-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of bis(2-aryl-5-pyridyl)diamine derivs. as inhibitors of IgE antibody production)

RN 483988-85-8 CAPLUS
CN 1,2-Ethanediamine, N,N'-dimethyl-N,N'-bis[6-(phenylmethoxy)-3-pyridinyl]- (9CI) (CA INDEX NAME)

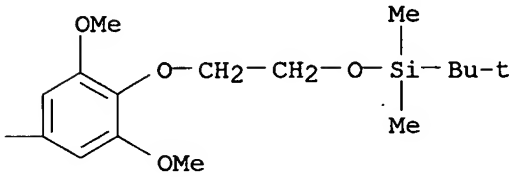


RN 483989-15-7 CAPLUS
CN 1,2-Ethanediamine, N,N'-bis[6-[4-[2-[[(1,1-dimethylethyl)dimethylsilyl]oxy ]ethoxy]-3,5-dimethoxyphenyl]-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



RN 483989-16-8 CAPLUS
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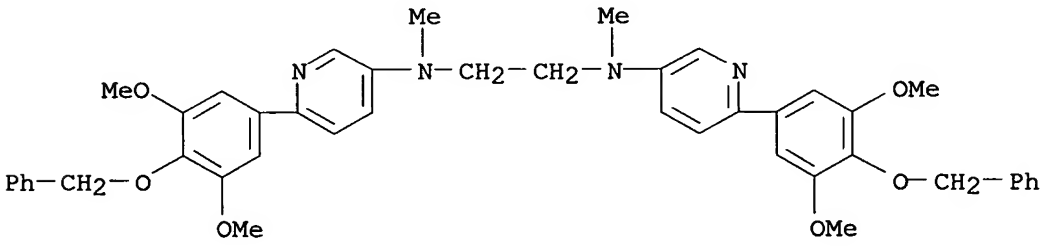
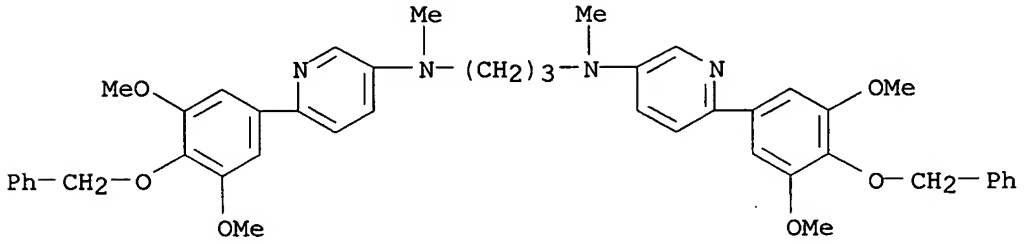


RN 483989-22-6 CAPLUS
CN 1,3-Propanediamine, N,N'-bis[6-[3,5-dimethoxy-4-(phenylmethoxy)phenyl]-3-pyridinyl]-N,N'-dimethyl- (9CI) (CA INDEX NAME)

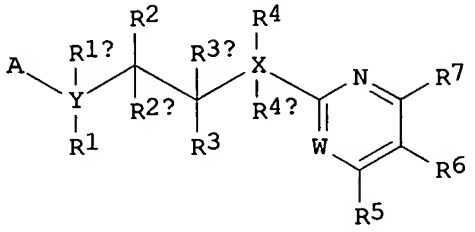


REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

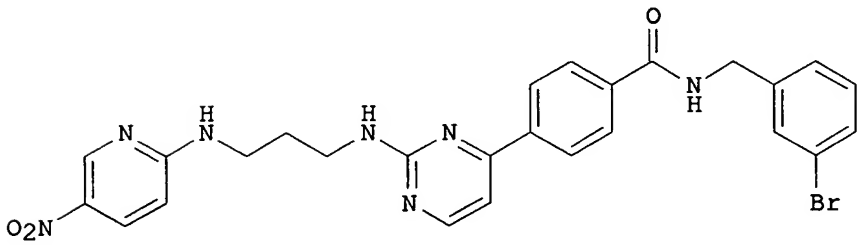
L13 ANSWER 8 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:814853 CAPLUS
DOCUMENT NUMBER: 137:325431
TITLE: Preparation of aminopyrimidines and -pyridines as glycogen synthase kinase 3 inhibitors
INVENTOR(S): Nuss, John M.; Harrison, Stephen D.; Ring, David B.; Boyce, Rustum S.; Johnson, Kirk; Pfister, Keith B.; Ramurthy, Savithri; Seely, Lynn; Wagman, Allan S.; Desai, Manjo; Levine, Barry H.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 134 pp., Cont.-in-part of U.S. 6,417,185.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| US 2002156087 | A1 | 20021024 | US 2001-949035 | | 20010906 |
| US 6417185 | B1 | 20020709 | US 1999-336038 | | 19990618 |
| PRIORITY APPLN. INFO.: | | | US 1999-336038 | A2 | 19990618 |
| | | | US 2000-230480P | P | 20000906 |
| | | | US 1998-89978P | P | 19980619 |

OTHER SOURCE(S): MARPAT 137:325431
GI




I




II

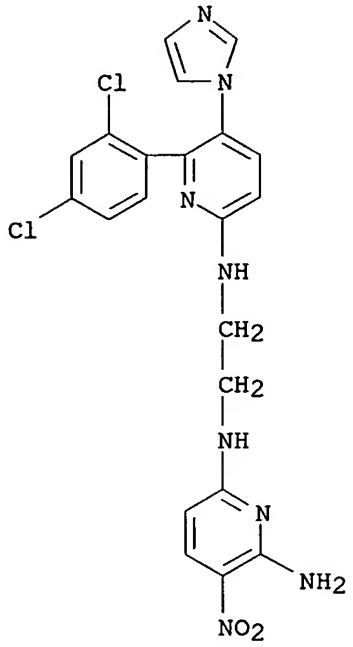
AB Title compds. I [wherein W = (un)substituted C or N; X and Y = independently N, O, or (un)substituted C; A = (un)substituted (hetero)aryl; R1, R1a, R2, R2a, R3, R3a, R4, and R4a = independently H, OH, alkoxy, acyl, (hetero)aryl, or (un)substituted (cyclo)alkyl, amino(alkyl), etc. ; R5 and R7 = independently H, halo, alkoxy, guanidinyl, (bi)aryl, hetero(bi)aryl, heterocycloalkyl, arylsulfonamido, or (un)substituted (cyclo)alkyl, amino(alkoxy), or amidino; R6 = H, halo,

carboxyl, NO2, (cyclo)amido, (cyclo)amidino, (cyclo)imido, CN, alkoxy, acyl(oxy), guanidinyl, (hetero)aryl, heterocyclo(alkyl), arylsulfonyl, arylsulfonamido, or (un)substituted alkyl, amino, etc.] were prepared as glycogen synthase kinase 3 (GSK3) inhibitors. For example, 2-chloro-5-nitropyridine was aminated by H2N(CH2)3NH2 and the product N-acylated by benzotriazolecarboxamidinium tosylate to give the alkylguanidine. The latter was cyclocondensed with resin-bound 4-(MeCO)C6H4CONHCH2C6H4Br-3 and Cs2CO3 to afford, after resin cleavage, the pyrimidinamine II. The most preferred compds. of the invention exhibited inhibitory activity against human GSK3β in a cell free assay with IC50 values of < 1 μM. Thus, I and compns. containing I may be employed alone or in combination with other pharmacol. active agents in the treatment of disorders mediated by GSK3 activity, such as diabetes, Alzheimer's disease and other neurodegenerative disorders, obesity, atherosclerotic cardiovascular disease, essential hypertension, polycystic ovary syndrome, syndrome X, ischemia, traumatic brain injury, bipolar disorder, immunodeficiency, or cancer (no data).

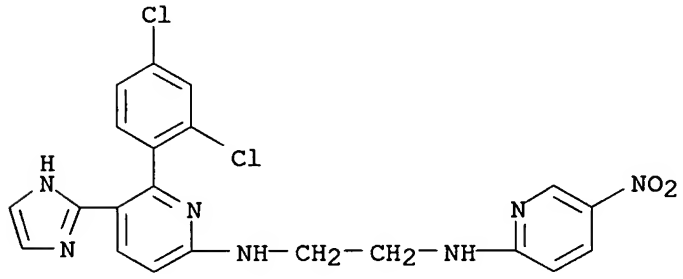
IT **252917-05-8P**, 2,6-Pyridinediamine, N6-[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]-3-nitro- **252936-05-3P**, 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- **252938-13-9P**, 2,5-Pyridinediamine, N5-(6-amino-5-nitro-2-pyridinyl)-N2-[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]-6-(2,4-dichlorophenyl)- **252942-25-9P**, 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- **252942-26-0P**, 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-[5-(trifluoromethyl)-2-pyridinyl]- **252942-30-6P**, Benzonitrile, 4-[3-(1H-imidazol-1-yl)-6-[[2-[(5-nitro-2-pyridinyl)amino]ethyl]amino]-2-pyridinyl]- **252942-34-0P**, 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- **252942-35-1P**, 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]amino]- **252942-37-3P**, 2,6-Pyridinediamine, N6-[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]-3-nitro- **252942-38-4P**, 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]amino]- **252942-39-5P**, 1,2-Ethanediamine, N-(6-amino-5-nitro-2-pyridinyl)-N'-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]- **252942-40-8P**, 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-[5-(trifluoromethyl)-2-pyridinyl]- **252942-41-9P**, 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]amino]ethyl]amino]-
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aminopyrimidines and -pyridines as glycogen synthase kinase 3 inhibitors)

RN 252917-05-8 CAPLUS

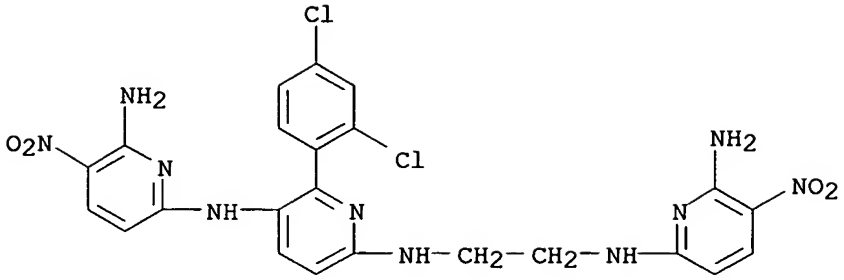
CN 2,6-Pyridinediamine, N6-[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]-3-nitro- (9CI) (CA INDEX NAME)



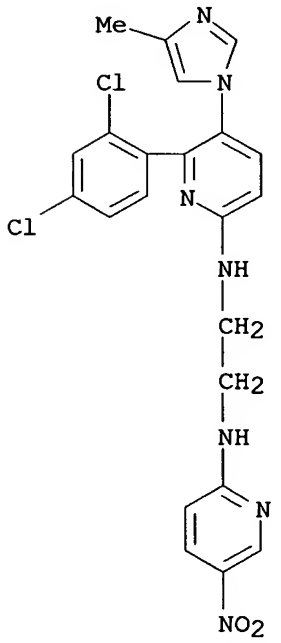
RN 252936-05-3 CAPLUS
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)



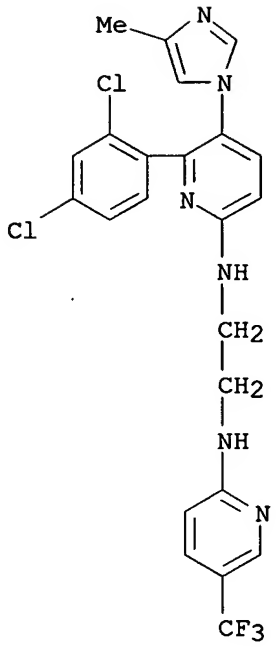
RN 252938-13-9 CAPLUS
CN 2,5-Pyridinediamine, N5-(6-amino-5-nitro-2-pyridinyl)-N2-[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]-6-(2,4-dichlorophenyl)- (9CI) (CA INDEX NAME)



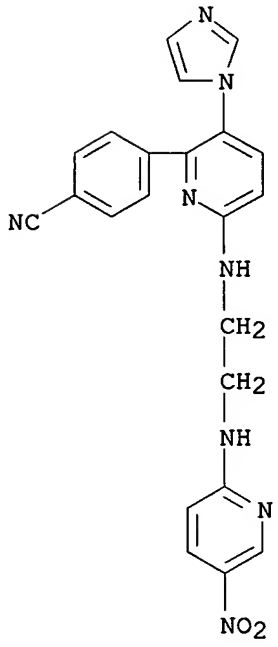
RN 252942-25-9 CAPLUS
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)



RN 252942-26-0 CAPLUS
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-[5-(trifluoromethyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)

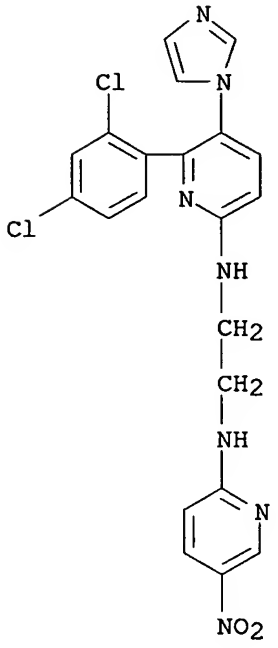


RN 252942-30-6 CAPLUS
CN Benzonitrile, 4-[3-(1H-imidazol-1-yl)-6-[[2-[(5-nitro-2-pyridinyl)amino]ethyl]amino]-2-pyridinyl]- (9CI) (CA INDEX NAME)

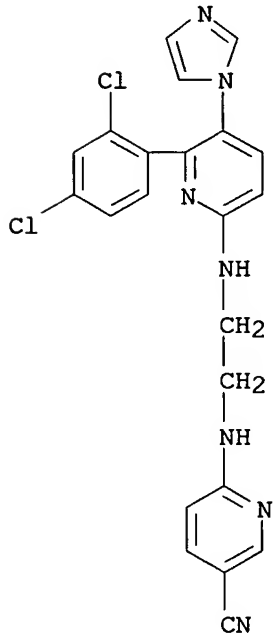


RN 252942-34-0 CAPLUS
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-

pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)

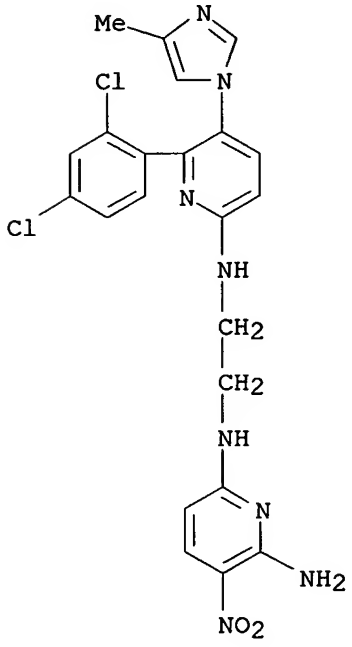


RN 252942-35-1 CAPLUS
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)

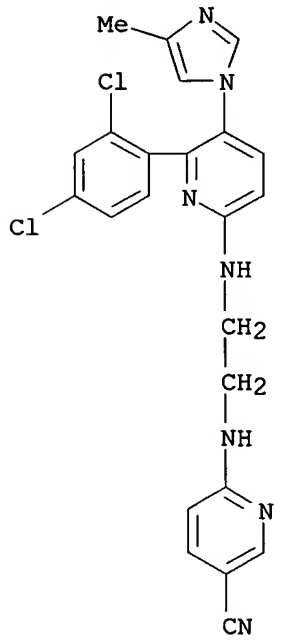


RN 252942-37-3 CAPLUS

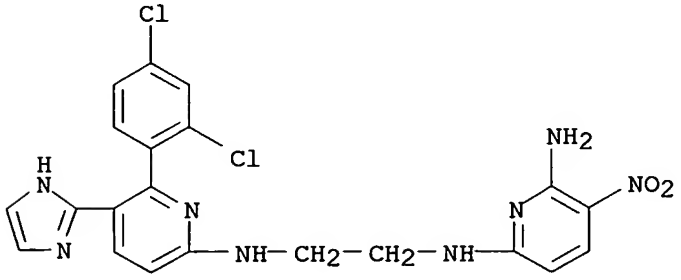
CN 2,6-Pyridinediamine, N6-[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]-3-nitro- (9CI) (CA INDEX NAME)



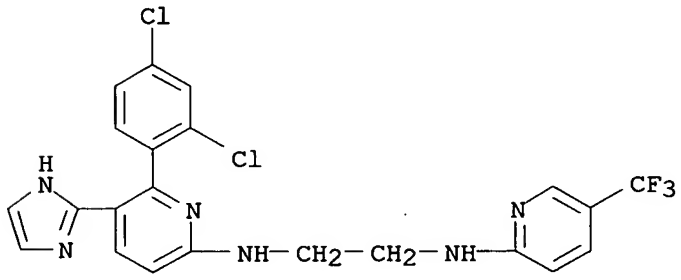
RN 252942-38-4 CAPLUS
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)



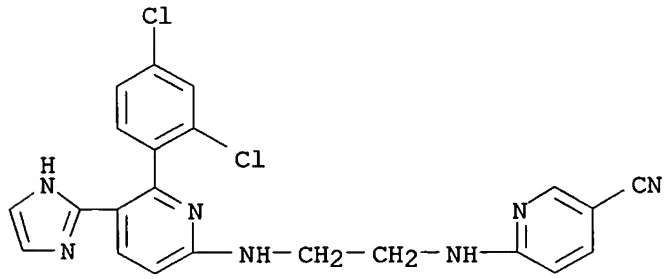
RN 252942-39-5 CAPLUS
CN 1,2-Ethanediamine, N-(6-amino-5-nitro-2-pyridinyl)-N'-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]- (9CI) (CA INDEX NAME)



RN 252942-40-8 CAPLUS
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-[5-(trifluoromethyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)



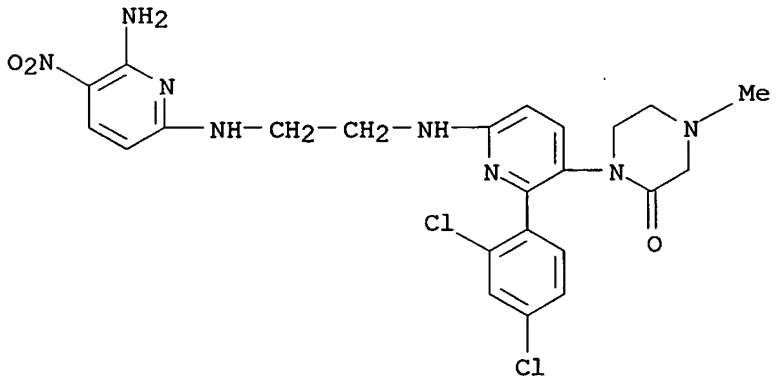
RN 252942-41-9 CAPLUS
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)



IT **403808-62-8 403808-64-0,** 6-[[2-[[6-(2,4-Dichlorophenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]amino]ethyl]amino]nicotinonitrile **403808-65-1 403808-66-2,** 6-[[2-[[6-(4-Ethylphenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]amino]ethyl]amino]nicotinonitrile **403808-67-3,** 6-[[2-[[6-(4-Ethylphenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl](methyl)amino]ethyl]amino]nicotinonitrile **403808-69-5**

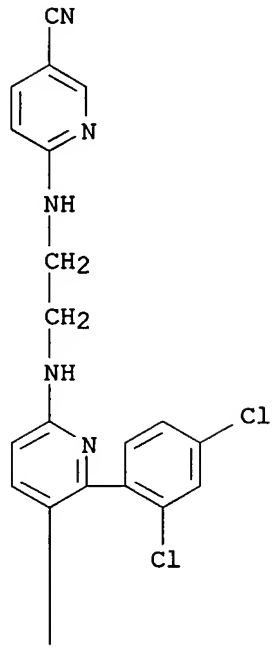
**403808-70-8 403808-71-9 403808-72-0**
**403808-73-1 403808-74-2 403808-79-7**
**403808-81-1 403808-84-4 403808-85-5**
**403808-86-6 403808-87-7 403808-88-8**
**403808-89-9 403808-90-2 403808-91-3**
**403808-92-4 403808-93-5 403808-94-6**
**403808-95-7 403808-96-8 403808-98-0**
**403809-00-7 403809-02-9 403809-03-0**
**403809-04-1 403809-05-2 403809-06-3**
**403809-07-4 403809-08-5 403809-09-6**
**403809-10-9 403809-11-0 403809-12-1**
**403809-13-2**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of aminopyrimidines and -pyridines as glycogen synthase kinase 3 inhibitors)

RN 403808-62-8 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

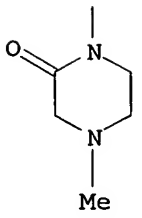



RN 403808-64-0 CAPLUS
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)

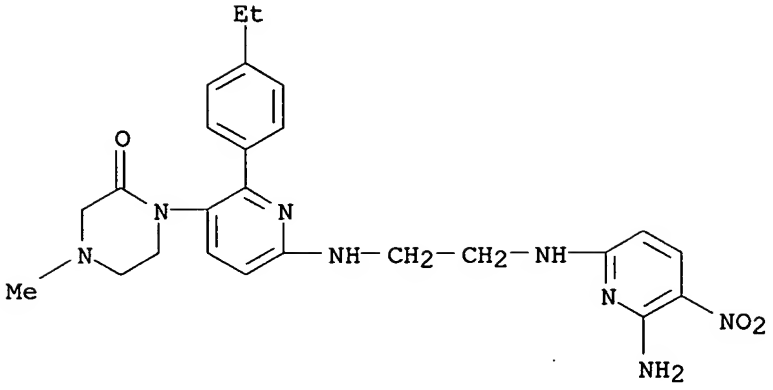
PAGE 1-A



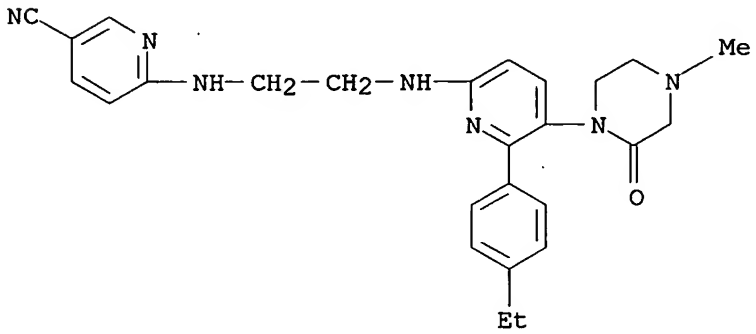

PAGE 2-A



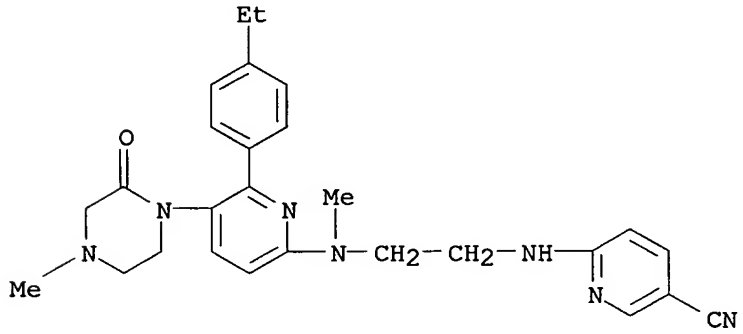

RN 403808-65-1 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(4-ethylphenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



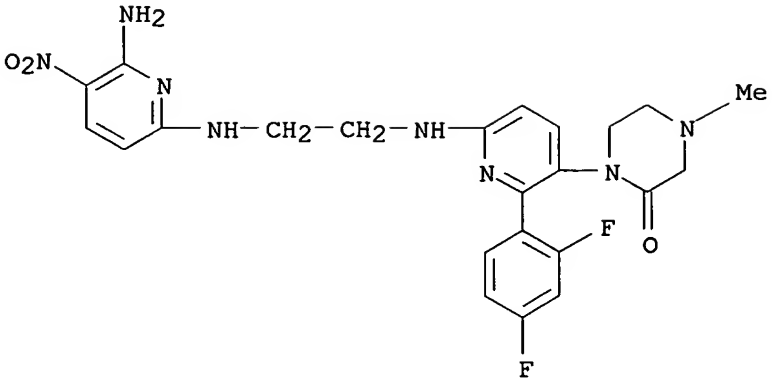
RN 403808-66-2 CAPLUS
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(4-ethylphenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)



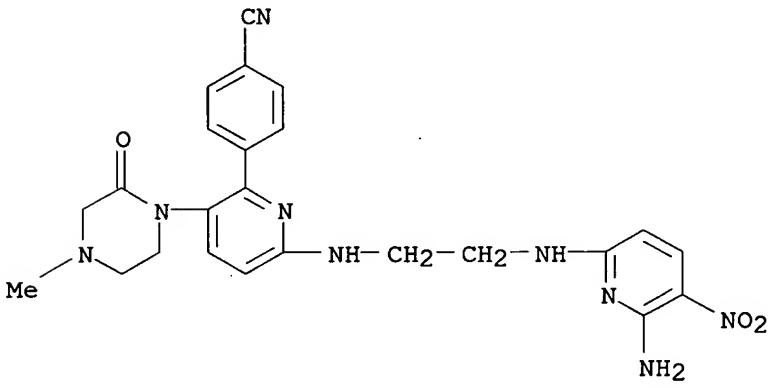
RN 403808-67-3 CAPLUS
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(4-ethylphenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]methylamino]ethyl]amino]- (9CI) (CA INDEX NAME)



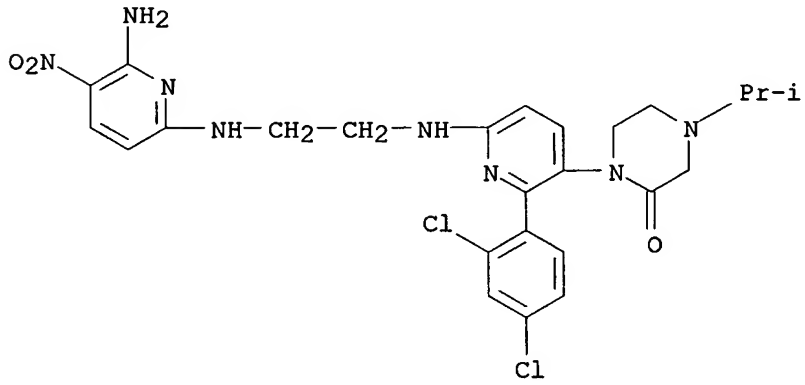
RN 403808-69-5 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-difluorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



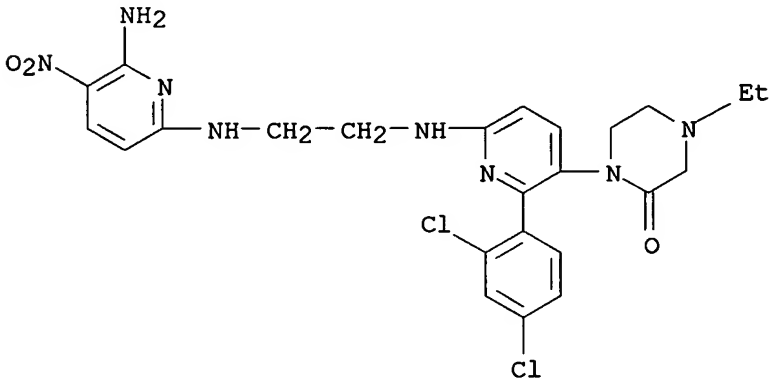
RN 403808-70-8 CAPLUS
CN Benzonitrile, 4-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-3-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)



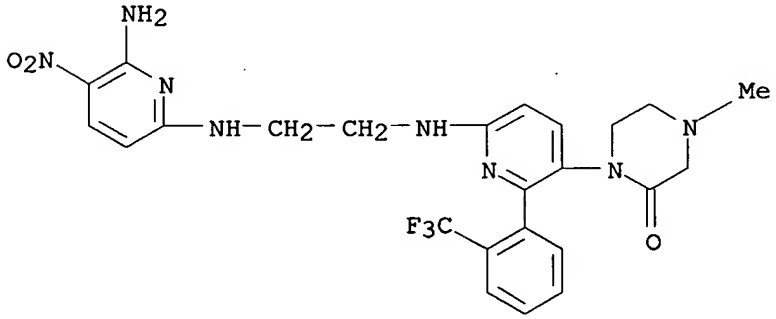
RN 403808-71-9 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-(1-methylethyl)- (9CI) (CA INDEX NAME)



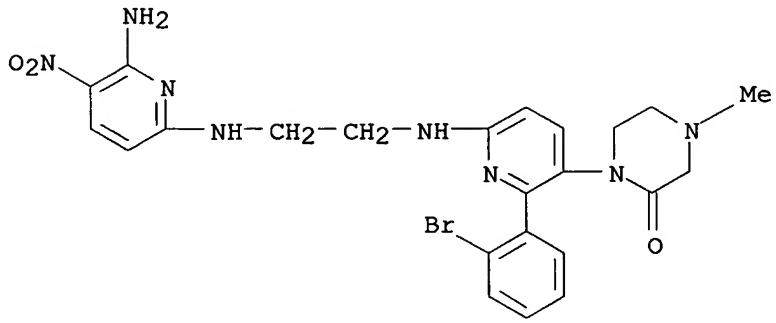
RN 403808-72-0 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-ethyl- (9CI) (CA INDEX NAME)



RN 403808-73-1 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-[2-(trifluoromethyl)phenyl]-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

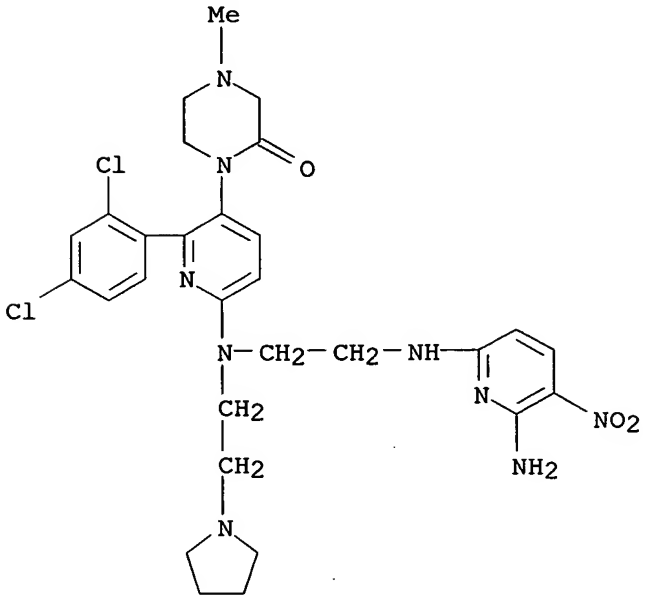


RN 403808-74-2 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2-bromophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

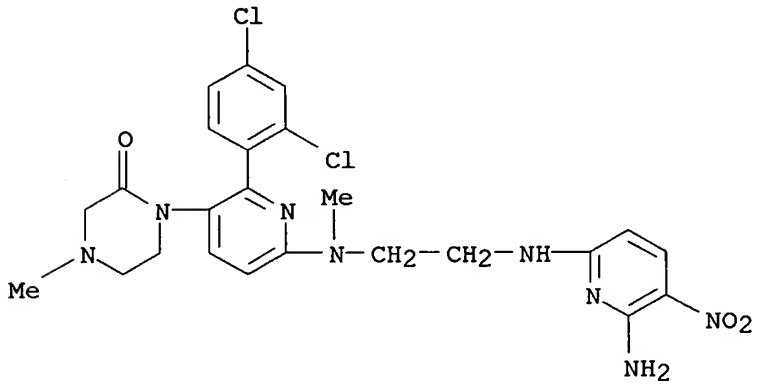


RN 403808-79-7 CAPLUS

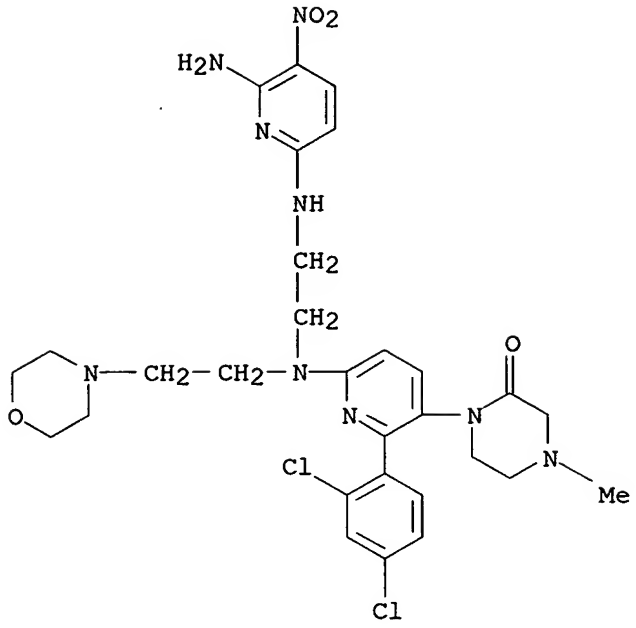
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl][2-(1-pyrrolidinyl)ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403808-81-1 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]methylamino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403808-84-4 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl][2-(4-morpholinyl)ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403808-85-5 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)

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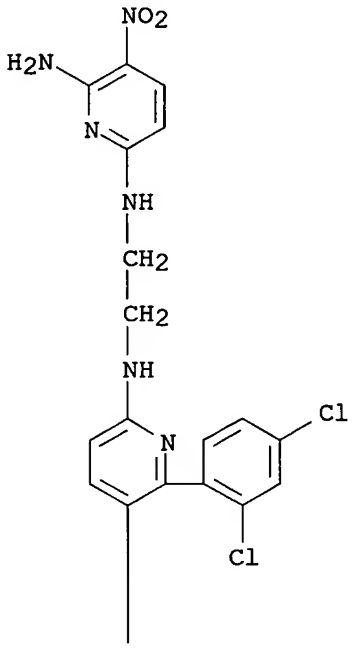

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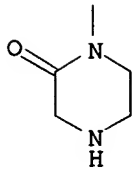
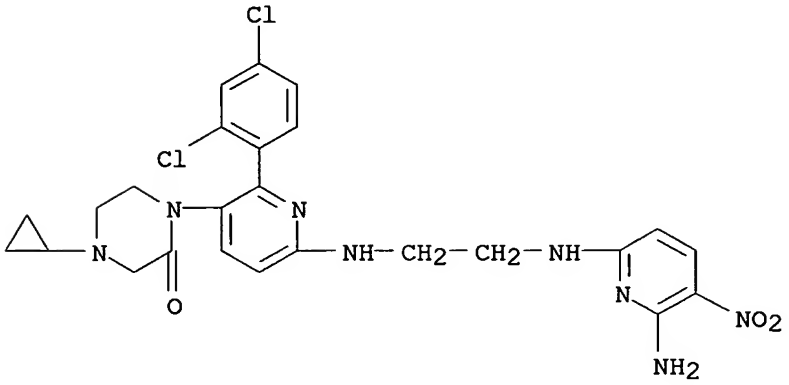
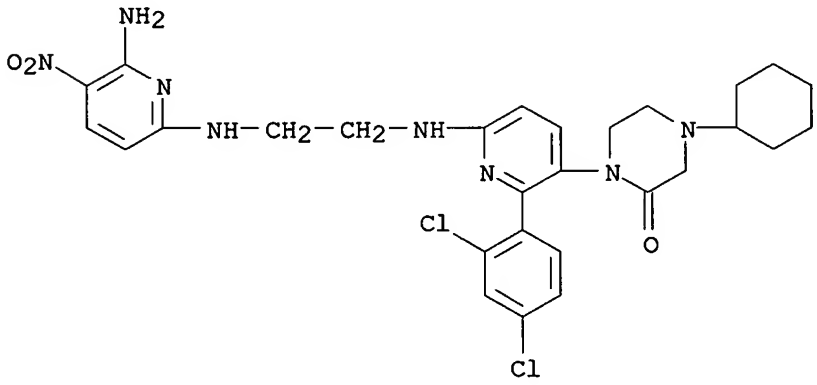


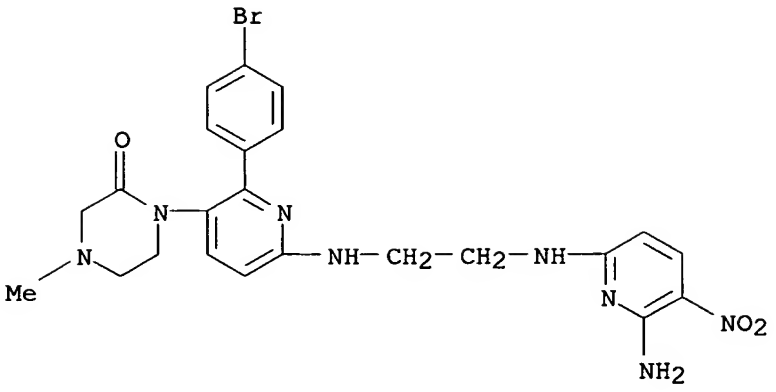
RN 403808-86-6 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-cyclopropyl- (9CI) (CA INDEX NAME)



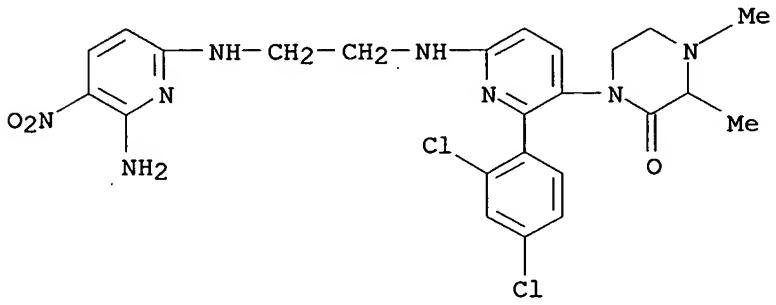
RN 403808-87-7 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-cyclohexyl- (9CI) (CA INDEX NAME)



RN 403808-88-8 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(4-bromophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403808-89-9 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-3,4-dimethyl- (9CI) (CA INDEX NAME)



RN 403808-90-2 CAPLUS
CN Piperazinone, 1-[2-(2,4-dichlorophenyl)-6-[[2-[(6-methoxy-5-nitro-2-pyridinyl)amino]ethyl]amino]-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

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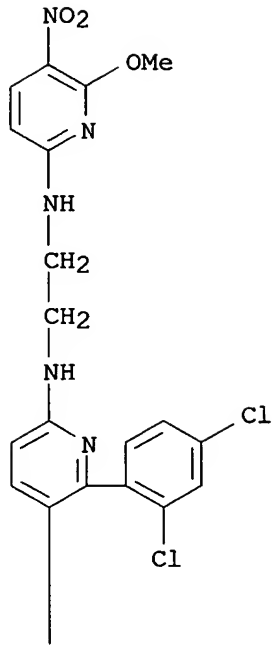


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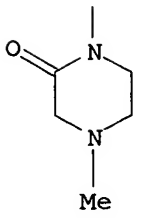


RN 403808-91-3 CAPLUS
CN Piperazinone, 1-[2-(2,4-dichlorophenyl)-6-[[2-[(5-nitro-2-pyridinyl)amino]ethyl]amino]-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

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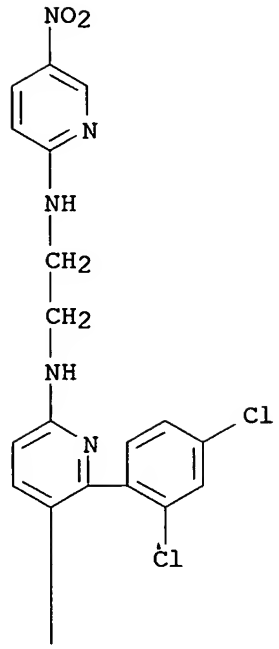

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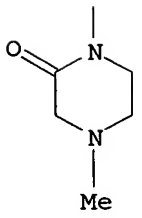
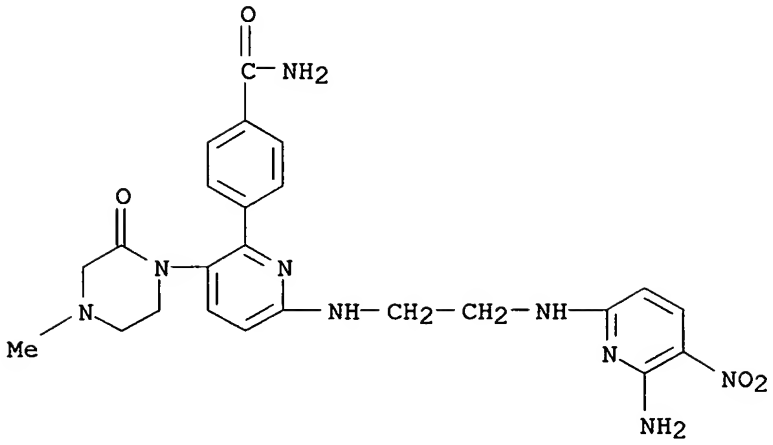
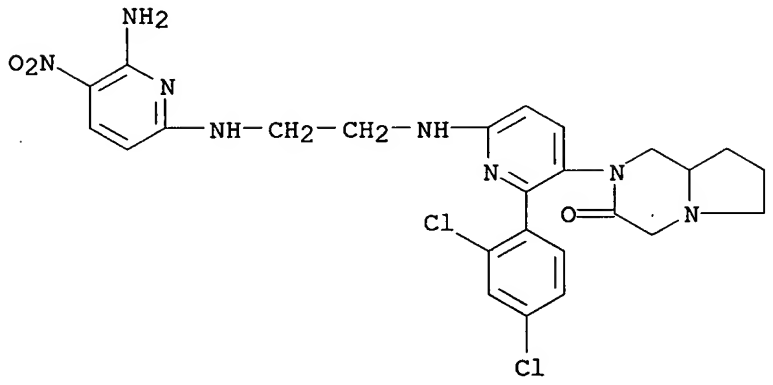


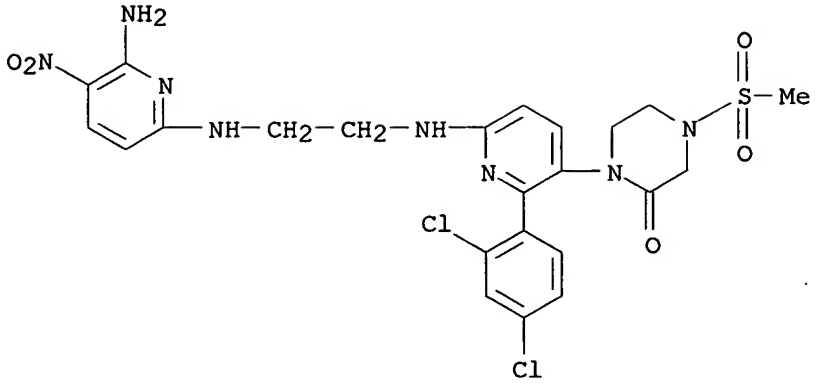
RN 403808-92-4 CAPLUS
CN Benzamide, 4-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-3-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)



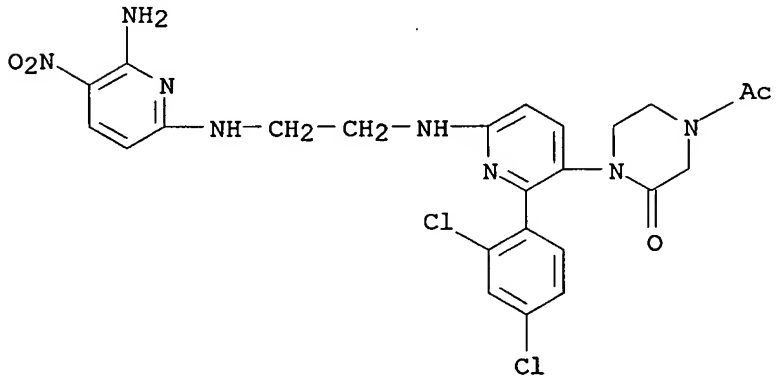
RN 403808-93-5 CAPLUS
CN Pyrrolo[1,2-a]pyrazin-3(4H)-one, 2-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]hexahydro- (9CI) (CA INDEX NAME)



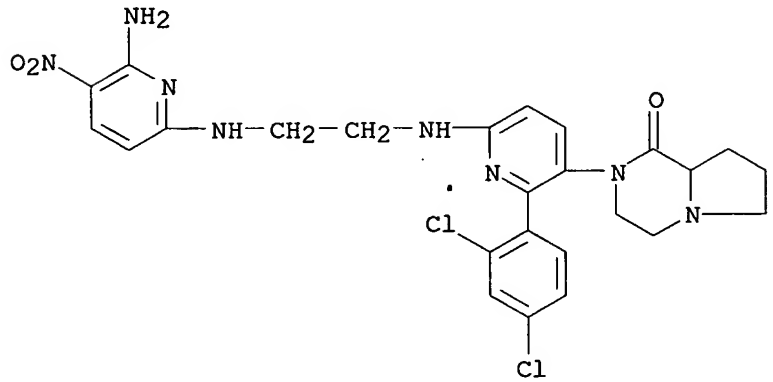
RN 403808-94-6 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-(methylsulfonyl)- (9CI) (CA INDEX NAME)



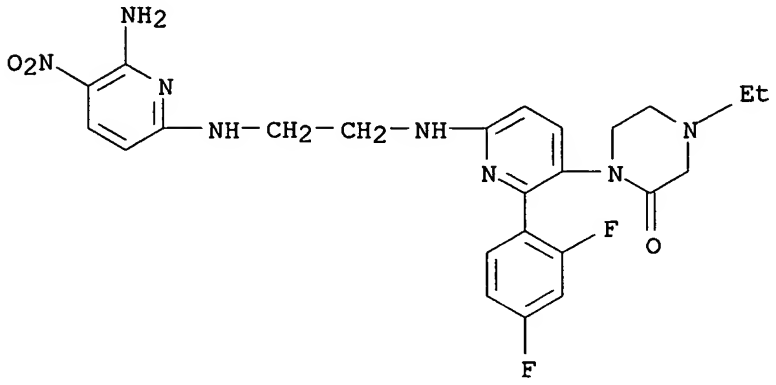
RN 403808-95-7 CAPLUS
CN Piperazinone, 4-acetyl-1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



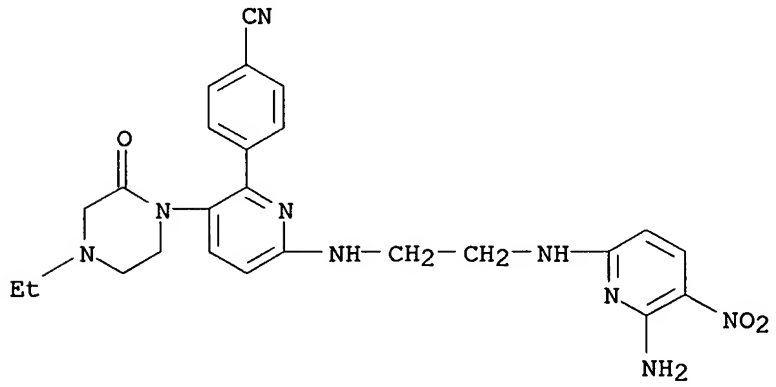
RN 403808-96-8 CAPLUS
CN Pyrrolo[1,2-a]pyrazin-1(2H)-one, 2-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]hexahydro- (9CI) (CA INDEX NAME)



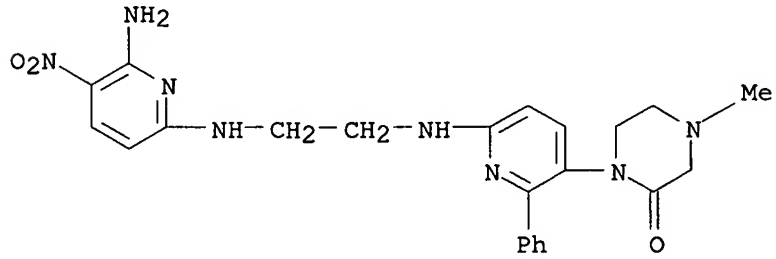
RN 403808-98-0 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-difluorophenyl)-3-pyridinyl]-4-ethyl- (9CI) (CA INDEX NAME)



RN 403809-00-7 CAPLUS
CN Benzonitrile, 4-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-3-(4-ethyl-2-oxo-1-piperazinyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)

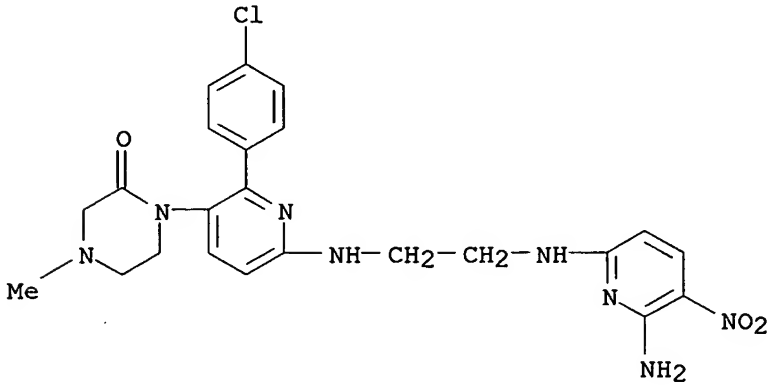


RN 403809-02-9 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-phenyl-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

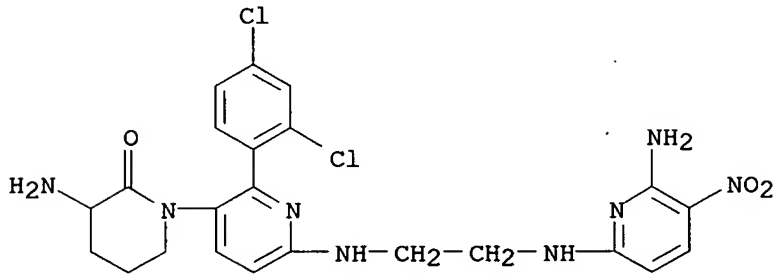


RN 403809-03-0 CAPLUS

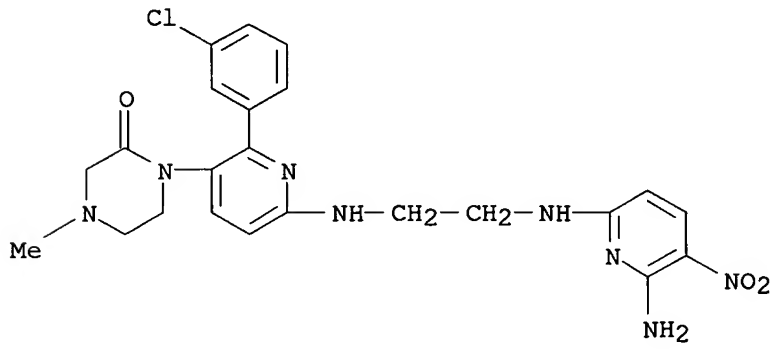
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(4-chlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403809-04-1 CAPLUS
CN 2-Piperidinone, 3-amino-1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



RN 403809-05-2 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(3-chlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403809-06-3 CAPLUS

CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenoxy)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

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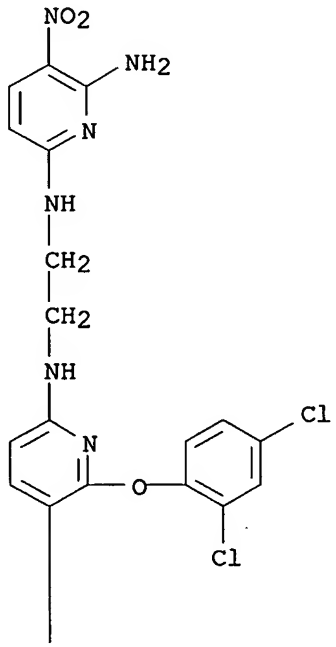


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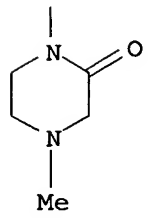
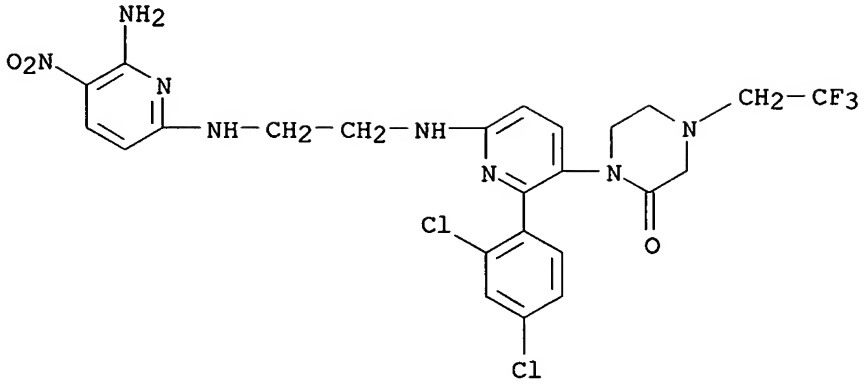



RN 403809-07-4 CAPLUS

CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)



RN 403809-08-5 CAPLUS
CN 3-Morpholinone, 4-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)

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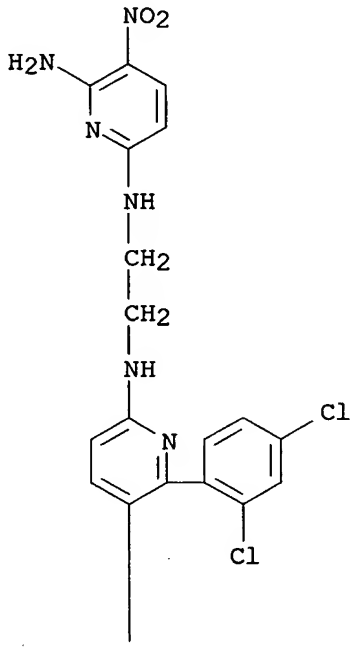

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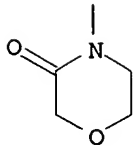
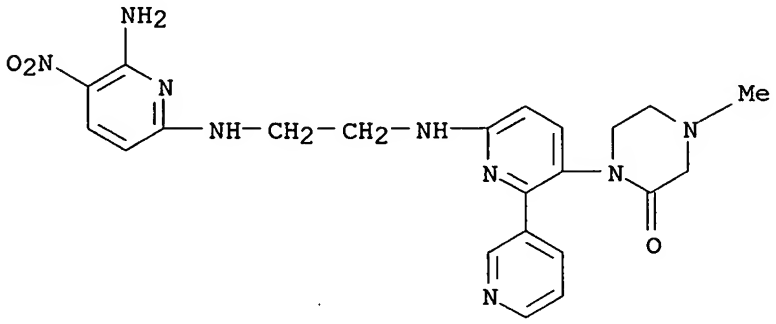


RN 403809-09-6 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino][2,3'-bipyridin]-3-yl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403809-10-9 CAPLUS
CN 2-Piperidinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)

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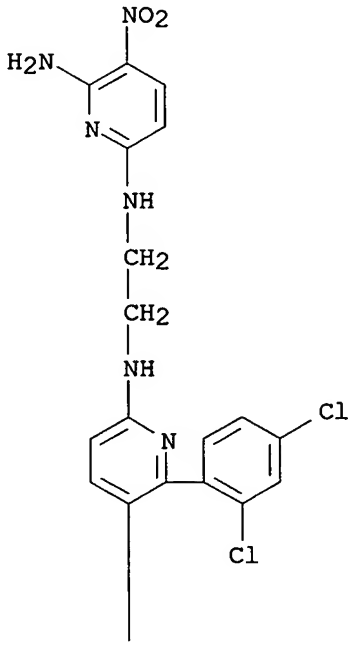

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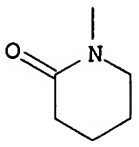
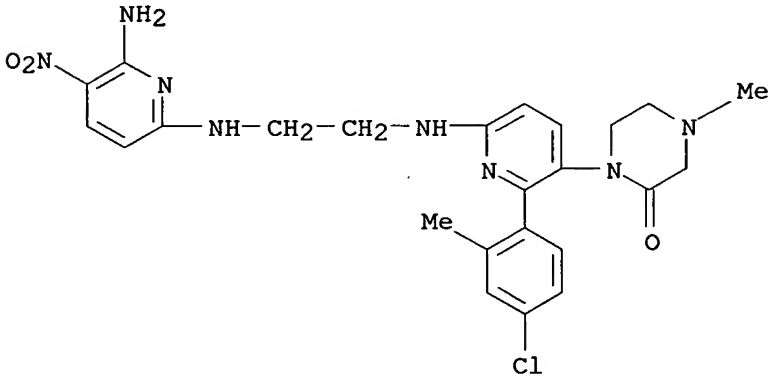
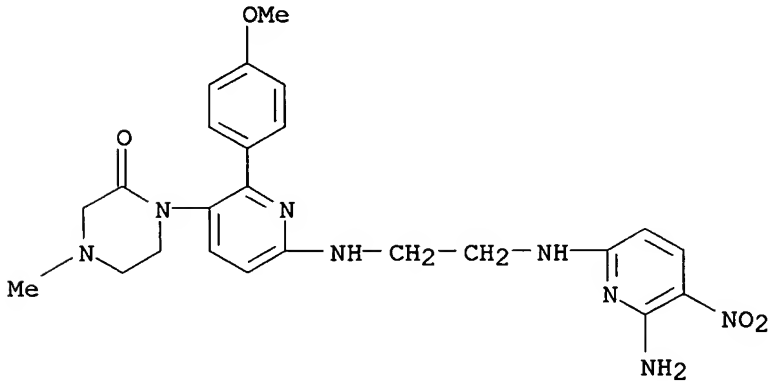


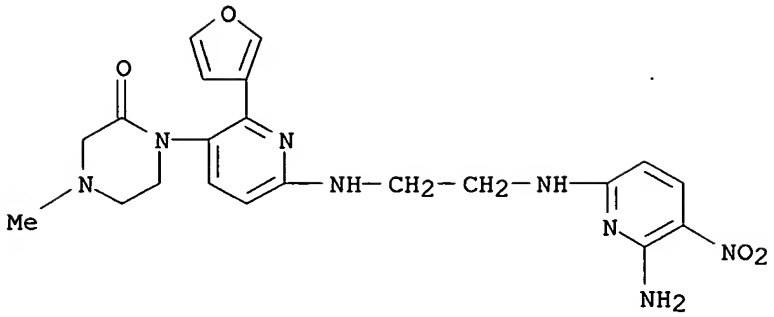
RN 403809-11-0 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(4-chloro-2-methylphenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403809-12-1 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(4-methoxyphenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403809-13-2 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(3-furanyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)


O
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N
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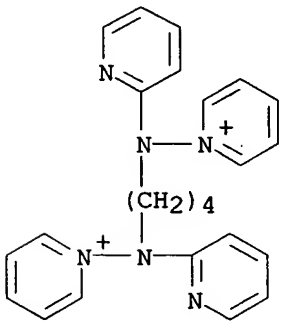
N
Me
NH
CH2
CH2
NH
N
NO2
NH2

L13 ANSWER 9 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:788799 CAPLUS
DOCUMENT NUMBER: 138:255068
TITLE: Pyridinium N-(2'-azinyl)aminides: regioselective synthesis of N-(2-pyridyl) substituted polyamines
AUTHOR(S): Jose Reyes, M.; Delgado, Francisca; Luisa Izquierdo, M.; Alvarez-Builla, Julio
CORPORATE SOURCE: Departamento de Quimica Organica, Universidad de Alcala, Madrid, 28871, Spain
SOURCE: Tetrahedron (2002), 58(42), 8573-8579
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:255068

AB The regioselective alkylation of pyridinium-N-(2'-pyridyl)aminide with alkyl dihalides under mild conditions, followed by N-N bond reduction of the corresponding bis-salts, allowed an easy preparation of N,N'-bis(2-pyridyl)diamines. The same methodol. has been applied to the synthesis of N,N',N''-tris(2-pyridyl)triamines.

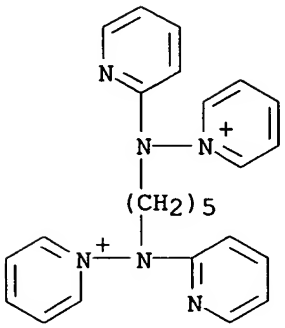
IT **502615-50-1P 502615-51-2P 502615-52-3P 502615-53-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(reduction of; preparation of bis(pyridyl)diamines and tris(pyridyl)triamines via regioselective alkylation of pyridinium(pyridyl)aminides followed by reduction of corresponding bis-salts)

RN 502615-50-1 CAPLUS
CN Pyridinium, 1,1'-[1,4-butanediylbis(2-pyridinylimino)]bis-, diiodide (9CI) (CA INDEX NAME)



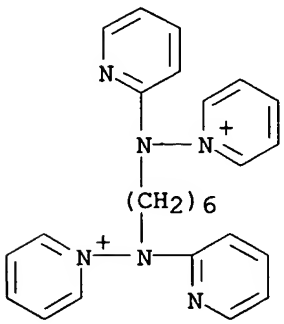
●2 I⁻

RN 502615-51-2 CAPLUS
CN Pyridinium, 1,1'-[1,5-pentanediylbis(2-pyridinylimino)]bis-, diiodide (9CI) (CA INDEX NAME)



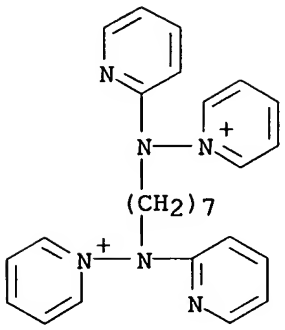
●2 $I^-$

RN 502615-52-3 CAPLUS
CN Pyridinium, 1,1'-[1,6-hexanediylbis(2-pyridinylimino)]bis-, diiodide (9CI) (CA INDEX NAME)



●2 $I^-$

RN 502615-53-4 CAPLUS
CN Pyridinium, 1,1'-[1,7-heptanediylbis(2-pyridinylimino)]bis-, dibromide (9CI) (CA INDEX NAME)



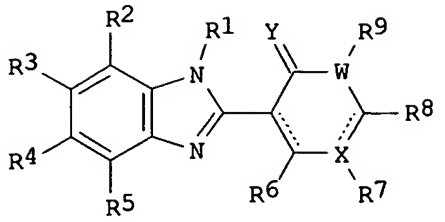
●2 $Br^-$

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 10 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:777929 CAPLUS
DOCUMENT NUMBER: 137:294954
TITLE: Preparation of 2-(4-substituted-2-oxo-1,2-dihydropyridin-3-yl)-benzimidazoles as novel tyrosine kinase inhibitors
INVENTOR(S): Wittman, Mark D.; Balasubramanian, Neelakantan; Velaparthi, Upender; Zimmermann, Kurt; Saulnier, Mark G.; Liu, Peiying; Sang, Xiaopeng; Frennesson, David B.; Stoffan, Karen M.; Tarrant, James G.
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 249 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| WO 2002079192 | A1 | 20021010 | WO 2002-US9402 | | 20020326 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | | |
| CA 2442428 | AA | 20021010 | CA 2002-2442428 | | 20020326 |
| EP 1381598 | A1 | 20040121 | EP 2002-723631 | | 20020326 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | | |
| EE 200300475 | A | 20040216 | EE 2003-475 | | 20020326 |
| CN 1514833 | A | 20040721 | CN 2002-810516 | | 20020326 |
| JP 2004534010 | T2 | 20041111 | JP 2002-577817 | | 20020326 |
| BR 2002008373 | A | 20050222 | BR 2002-8373 | | 20020326 |
| ZA 2003007466 | A | 20050113 | ZA 2003-7466 | | 20030925 |
| NO 2003004308 | A | 20031126 | NO 2003-4308 | | 20030926 |
| BG 108206 | A | 20041130 | BG 2003-108206 | | 20030926 |
| PRIORITY APPLN. INFO.: | | | US 2001-279327P | P | 20010328 |
| | | | WO 2002-US9402 | W | 20020326 |

OTHER SOURCE(S): MARPAT 137:294954
GI



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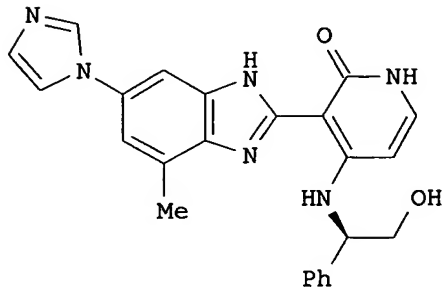


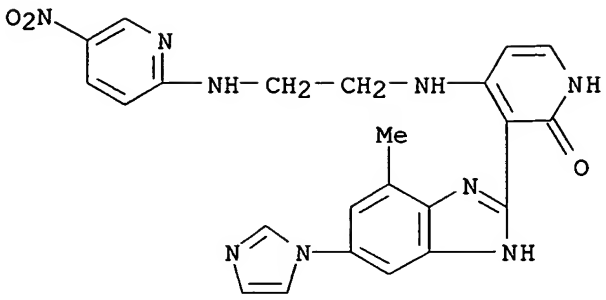
II

AB The title compds. [I; X = N, C, a bond, etc.; Y = O, S; W = N, C, O, S (if W = O or S, then R9 is absent); R1-R9 = H, alkyl, cycloalkyl, etc.] and their pharmaceutically acceptable salts which inhibit tyrosine kinase enzymes thereby making them useful as anti-cancer agents, were prepared Thus, reacting 3-[6-(imidazol-1-yl)-4-methyl-1H-benzimidazol-2-yl]-4-iodo-1H-pyridin-2-one (preparation given) with (S)-(-)-2-phenylglycinol in the presence of N-methylmorpholine in DMF afforded 52% (S)-II which showed IC50 of 1.0 μM in cytotoxicity assay (HT-29 human colon tumor cell line). 30 Of the exemplified compds. I showed kinase activity of <25μM against one or more of the following kinases CDK, EMT, FAK, Her1, Her2, IGF, IR, LCK, MET, PDGF, VEGF. The compds. I are also useful for the treatment of other diseases which can be treated by inhibiting tyrosine kinase enzymes.

IT **468735-06-0P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 2-(4-substituted-2-oxo-1,2-dihydropyridin-3-yl)-benzimidazoles as novel tyrosine kinase inhibitors)

RN 468735-06-0 CAPLUS

CN 2(1H)-Pyridinone, 3-[6-(1H-imidazol-1-yl)-4-methyl-1H-benzimidazol-2-yl]-4-[[2-[(5-nitro-2-pyridinyl)amino]ethyl]amino]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

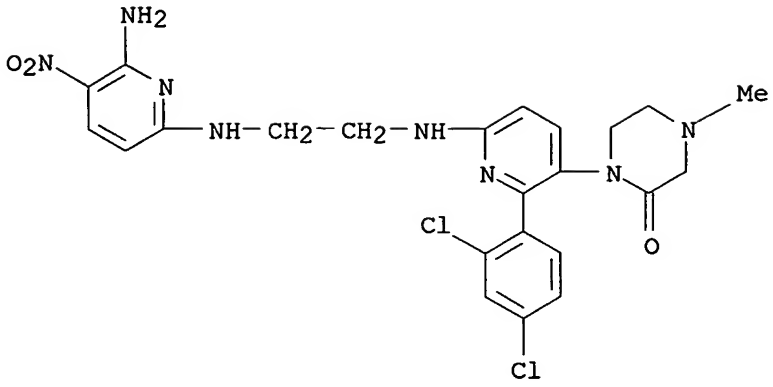
L18 ANSWER 11 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:240954 CAPLUS
DOCUMENT NUMBER: 136:275370
TITLE: Crystallization and crystal structure of human glycogen synthase kinase 3β protein and methods of use thereof
INVENTOR(S): Bussiere, Dirksen E.; He, Min; Le, Vincent P.; Jansen, Johanna M.; Chin, S. Michael; Martin, Eric
PATENT ASSIGNEE(S): Chiron Corporation, USA
SOURCE: PCT Int. Appl., 200 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2002024893 | A2 | 20020328 | WO 2001-US29549 | 20010919 |
| WO 2002024893 | A3 | 20030904 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2001092906 | A5 | 20020402 | AU 2001-92906 | 20010919 |
| EP 1360286 | A2 | 20031112 | EP 2001-973313 | 20010919 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2004533597 | T2 | 20041104 | JP 2002-529488 | 20010919 |
| US 2004101907 | A1 | 20040527 | US 2003-450422 | 20031211 |
| PRIORITY APPLN. INFO.: | | | US 2000-233538P | P 20000919 |
| | | | WO 2001-US29549 | W 20010919 |

AB The invention provides the three-dimensional structure of a construct of human glycogen synthase kinase 3 (GSK3); crystals of a construct of human glycogen synthase kinase 3-β (GSK3-β); containing the protein's catalytic kinase domain; a domain for crystallizing the protein construct to provide a GSK3 crystal sufficient for structure determination; and a method for using the GSK3 construct's three dimensional structure for the identification of possible therapeutic compds. in the treatment of various disease conditions mediated by GSK3 activity.

IT **403808-62-8**
RL: NUU (Other use, unclassified); USES (Uses)
(GSK3 crystals containing; crystallization and crystal structure of human glycogen synthase kinase 3β protein and methods of use thereof)

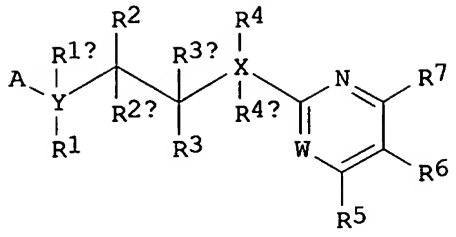
RN 403808-62-8 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



L13 ANSWER 12 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:185092 CAPLUS
DOCUMENT NUMBER: 136:247598
TITLE: Preparation of aminopyrimidines and -pyridines as glycogen synthase kinase 3 inhibitors
INVENTOR(S): Nuss, John M.; Harrison, Stephen D.; Ring, David B.; Boyce, Rustum S.; Johnson, Kirk; Pfister, Keith B.; Ramurthy, Savithri; Seely, Lynn; Wagman, Allan S.; Desai, Manoj; Levine, Barry H.
PATENT ASSIGNEE(S): Chiron Corporation, USA
SOURCE: PCT Int. Appl., 268 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| WO 2002020495 | A2 | 20020314 | WO 2001-US42081 | | 20010906 |
| WO 2002020495 | A3 | 20020620 | | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | | |
| AU 2001095026 | A5 | 20020322 | AU 2001-95026 | | 20010906 |
| EP 1317433 | A2 | 20030611 | EP 2001-975734 | | 20010906 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | | |
| JP 2004514656 | T2 | 20040520 | JP 2002-525117 | | 20010906 |
| PRIORITY APPLN. INFO.: | | | US 2000-230480P | P | 20000906 |
| | | | WO 2001-US42081 | W | 20010906 |

OTHER SOURCE(S): MARPAT 136:247598
GI



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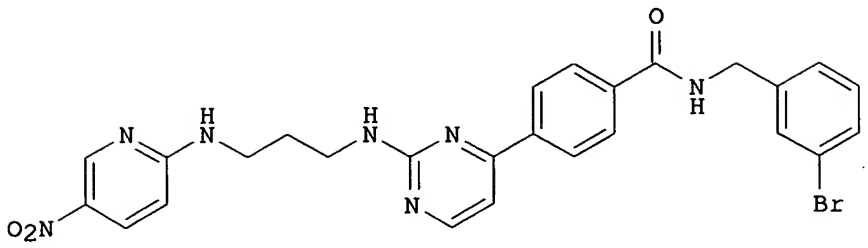


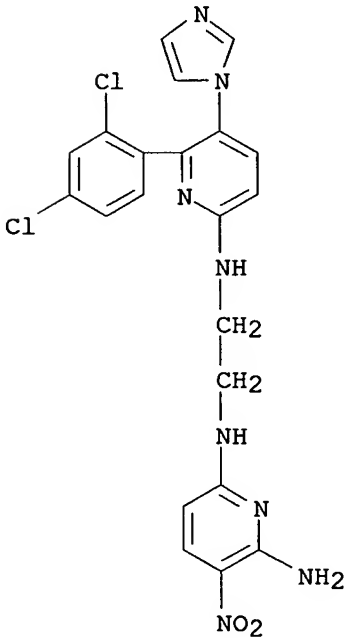
II

AB Title compds. I [wherein W = (un)substituted C or N; X and Y = independently N, O, or (un)substituted C; A = (un)substituted (hetero)aryl; R1, R1a, R2, R2a, R3, R3a, R4, and R4a = independently H, OH, alkoxy, acyl, (hetero)aryl, or (un)substituted (cyclo)alkyl, amino(alkyl), etc. ; R5 and R7 = independently H, halo, alkoxy, guanidinyl, (bi)aryl, hetero(bi)aryl, heterocycloalkyl, arylsulfonamido, or (un)substituted (cyclo)alkyl, amino(alkoxy), or amidino; R6 = H, halo, carboxyl, NO2, (cyclo)amido, (cyclo)amidino, (cyclo)imido, CN, alkoxy, acyl(oxy), guanidinyl, (hetero)aryl, heterocyclo(alkyl), arylsulfonyl, arylsulfonamido, or (un)substituted alkyl, amino, etc.] were prepared as glycogen synthase kinase 3 (GSK3) inhibitors. For example, 2-chloro-5-nitropyridine was aminated by H2N(CH2)3NH2 and the product N-acylated by benzotriazolecarboxamidinium tosylate to give the alkylguanidine. The latter was cyclocondensed with resin-bound 4-(MeCO)C6H4CONHCH2C6H4Br-3 and Cs2CO3 to afford, after resin cleavage, the pyrimidinamine II. The most preferred compds. of the invention exhibited inhibitory activity against human GSK3β in a cell free assay with IC50 values of < 1 μM. Thus, I and compns. containing I may be employed alone or in combination with other pharmacol. active agents in the treatment of disorders mediated by GSK3 activity, such as diabetes, Alzheimer's disease and other neurodegenerative disorders, obesity, atherosclerotic cardiovascular disease, essential hypertension, polycystic ovary syndrome, syndrome X, ischemia, traumatic brain injury, bipolar disorder, immunodeficiency, or cancer (no data).

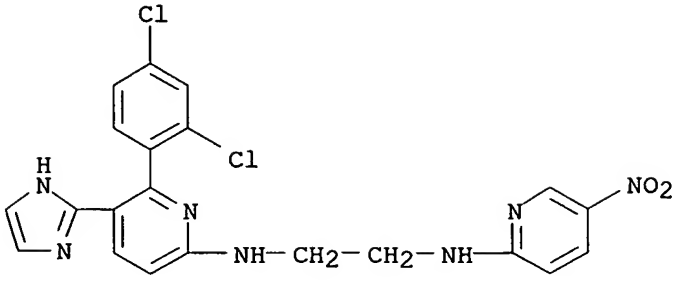
IT **252917-05-8P**, 2,6-Pyridinediamine, N6-[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]-3-nitro- **252936-05-3P**, 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- **252938-13-9P**, 2,5-Pyridinediamine, N5-(6-amino-5-nitro-2-pyridinyl)-N2-[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]-6-(2,4-dichlorophenyl)- **252942-25-9P**, 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- **252942-26-0P**, 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-[5-(trifluoromethyl)-2-pyridinyl]- **252942-30-6P**, Benzonitrile, 4-[3-(1H-imidazol-1-yl)-6-[[2-[(5-nitro-2-pyridinyl)amino]ethyl]amino]-2-pyridinyl]- **252942-34-0P**, 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-

pyridinyl]-N'-(5-nitro-2-pyridinyl)- **252942-35-1P**,
3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]amino]- **252942-37-3P**,
2,6-Pyridinediamine, N6-[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]-3-nitro- **252942-38-4P**,
3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]amino]- **252942-39-5P**,
1,2-Ethanediamine, N-(6-amino-5-nitro-2-pyridinyl)-N'-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]- **252942-40-8P**,
1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-[5-(trifluoromethyl)-2-pyridinyl]- **252942-41-9P**,
3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]amino]ethyl]amino]-
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aminopyrimidines and -pyridines as glycogen synthase kinase 3 inhibitors)

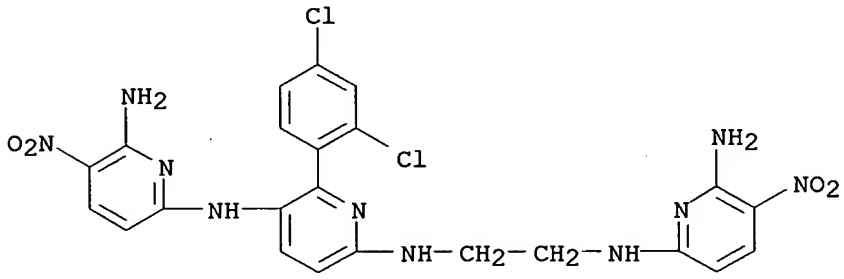
RN 252917-05-8 CAPLUS
CN 2,6-Pyridinediamine, N6-[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]-3-nitro- (9CI) (CA INDEX NAME)



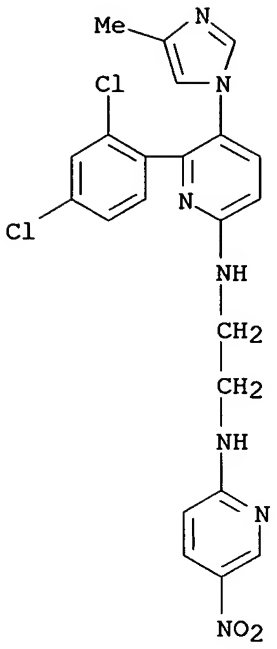

RN 252936-05-3 CAPLUS
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)



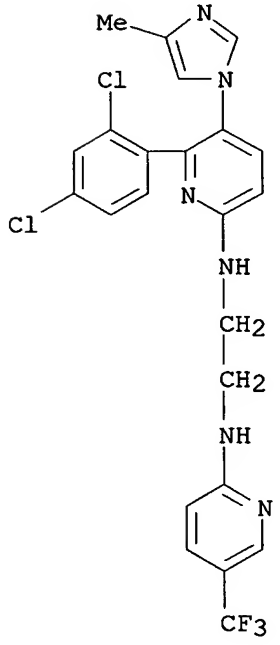
RN 252938-13-9 CAPLUS
CN 2,5-Pyridinediamine, N5-(6-amino-5-nitro-2-pyridinyl)-N2-[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]-6-(2,4-dichlorophenyl)- (9CI) (CA INDEX NAME)



RN 252942-25-9 CAPLUS
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)

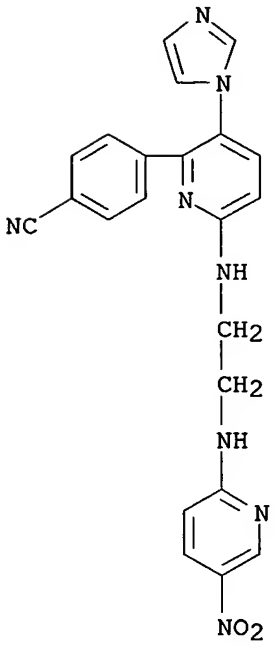


RN 252942-26-0 CAPLUS
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-[5-(trifluoromethyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)

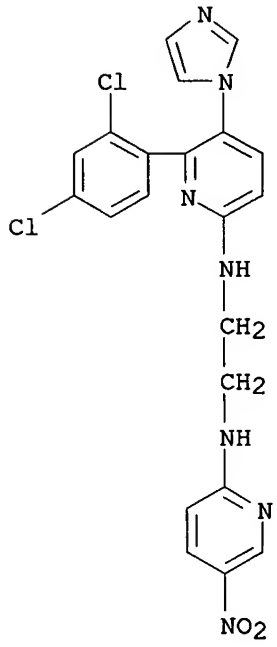


RN 252942-30-6 CAPLUS
CN Benzonitrile, 4-[3-(1H-imidazol-1-yl)-6-[[2-[(5-nitro-2-

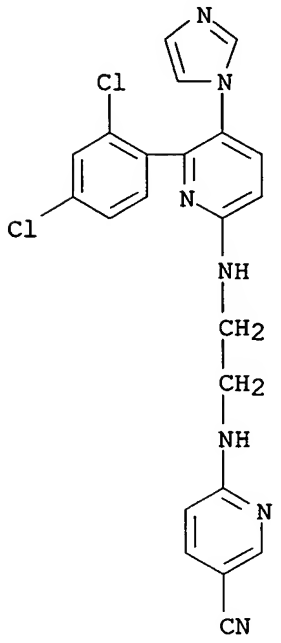
pyridinyl)amino]ethyl]amino]-2-pyridinyl]- (9CI) (CA INDEX NAME)



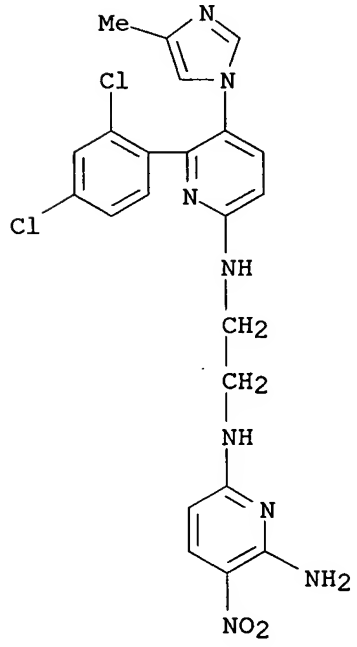
RN 252942-34-0 CAPLUS
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)



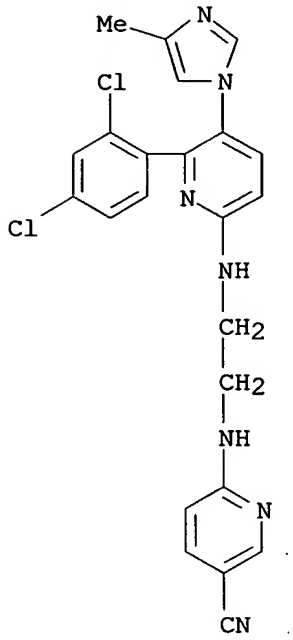
RN 252942-35-1 CAPLUS
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)



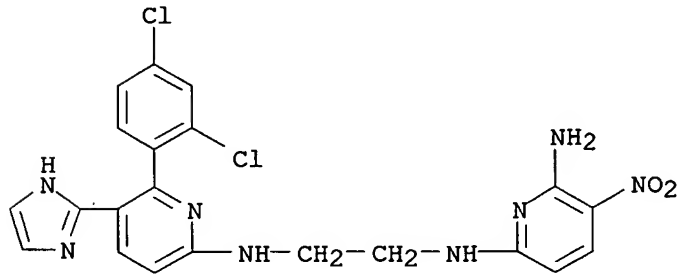
RN 252942-37-3 CAPLUS
CN 2,6-Pyridinediamine, N6-[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]-3-nitro- (9CI) (CA INDEX NAME)



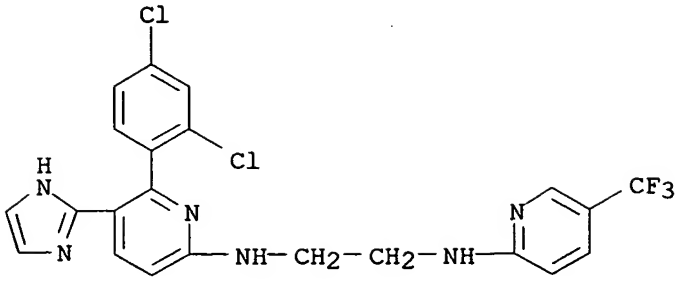
RN 252942-38-4 CAPLUS
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)



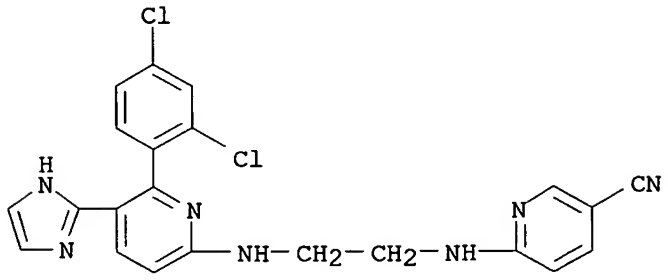
RN 252942-39-5 CAPLUS
CN 1,2-Ethanediamine, N-(6-amino-5-nitro-2-pyridinyl)-N'-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]- (9CI) (CA INDEX NAME)



RN 252942-40-8 CAPLUS
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-[5-(trifluoromethyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)

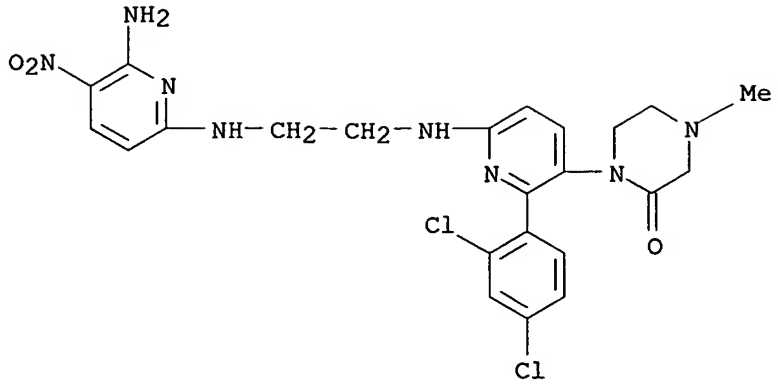


RN 252942-41-9 CAPLUS
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)



IT **403808-62-8 403808-64-0,** 6-[[2-[[6-(2,4-Dichlorophenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]amino]ethyl]amino]nicotinonitrile **403808-65-1 403808-66-2,** 6-[[2-[[6-(4-Ethylphenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]amino]ethyl]amino]nicotinonitrile **403808-67-3,** 6-[[2-[[6-(4-Ethylphenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl](methyl)amino]ethyl]amino]nicotinonitrile **403808-69-5 403808-70-8 403808-71-9 403808-72-0 403808-73-1 403808-74-2 403808-79-7 403808-81-1 403808-84-4 403808-85-5 403808-86-6 403808-87-7 403808-88-8 403808-89-9 403808-90-2 403808-91-3 403808-92-4 403808-93-5 403808-94-6 403808-95-7 403808-96-8 403808-98-0 403809-00-7 403809-02-9 403809-03-0 403809-04-1 403809-05-2 403809-06-3 403809-07-4 403809-08-5 403809-09-6 403809-10-9 403809-11-0 403809-12-1 403809-13-2**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of aminopyrimidines and -pyridines as glycogen synthase kinase 3 inhibitors)

RN 403808-62-8 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403808-64-0 CAPLUS
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)

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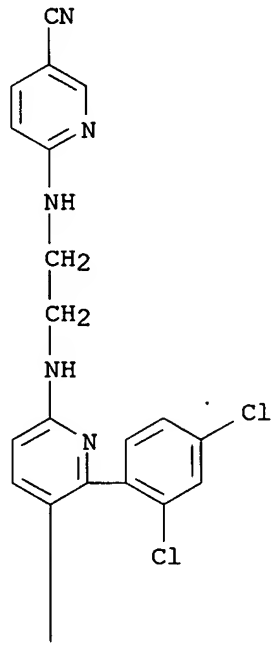
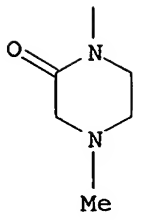
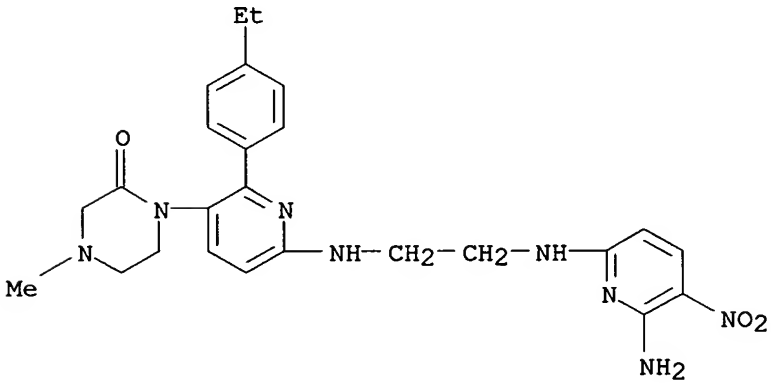
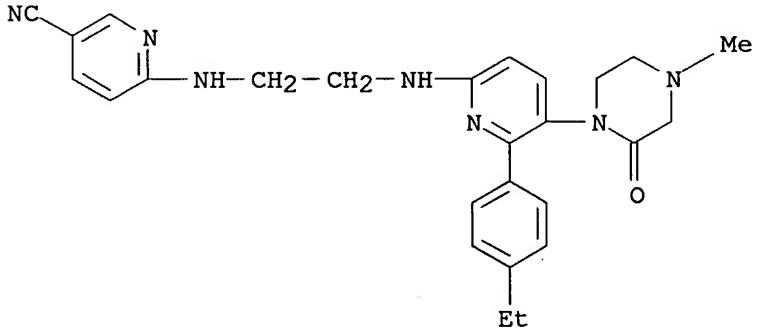




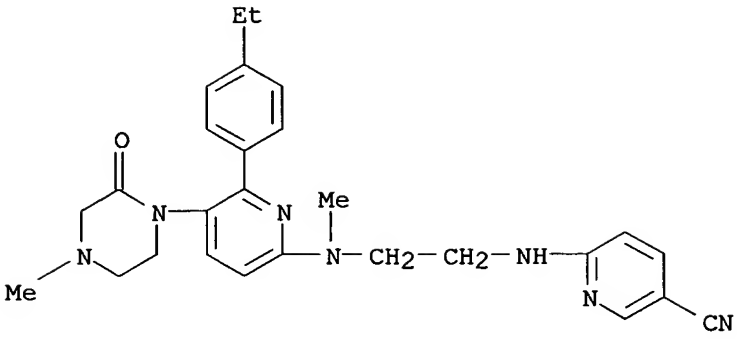
RN 403808-65-1 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(4-ethylphenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



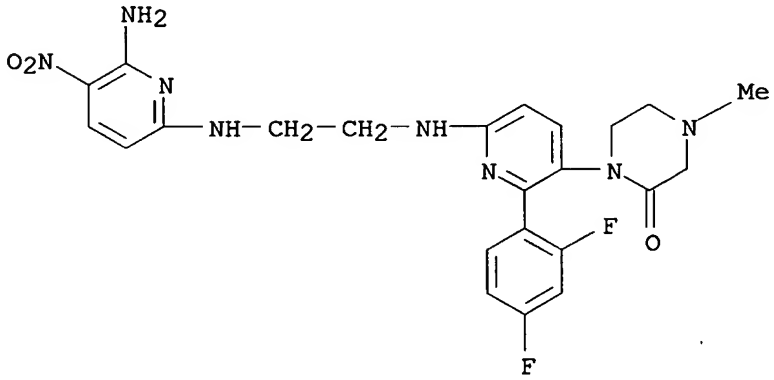
RN 403808-66-2 CAPLUS
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(4-ethylphenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)



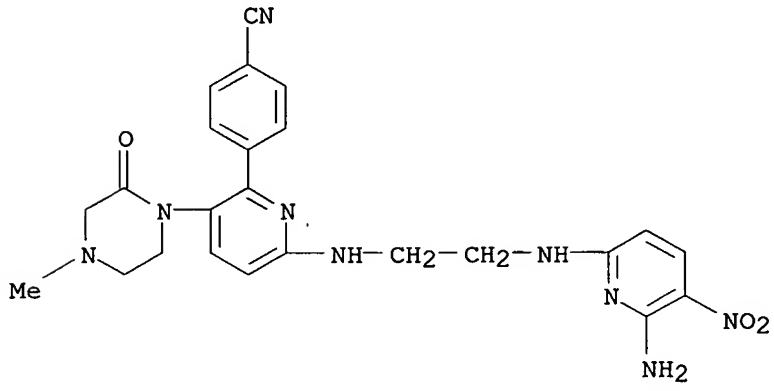
RN 403808-67-3 CAPLUS
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(4-ethylphenyl)-5-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]methylamino]ethyl]amino]- (9CI) (CA INDEX NAME)



RN 403808-69-5 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-difluorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

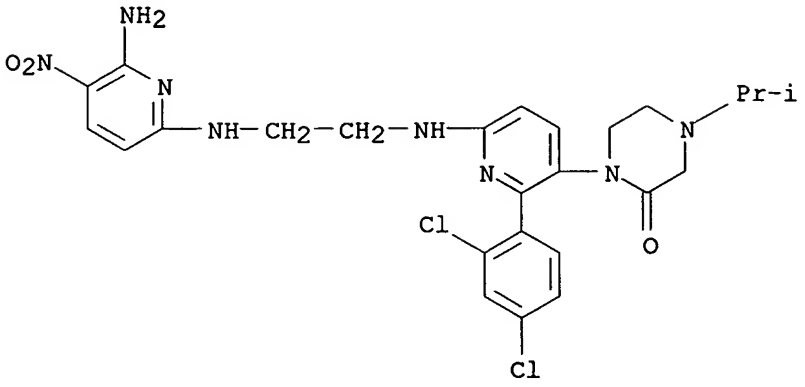


RN 403808-70-8 CAPLUS
CN Benzonitrile, 4-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-3-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)

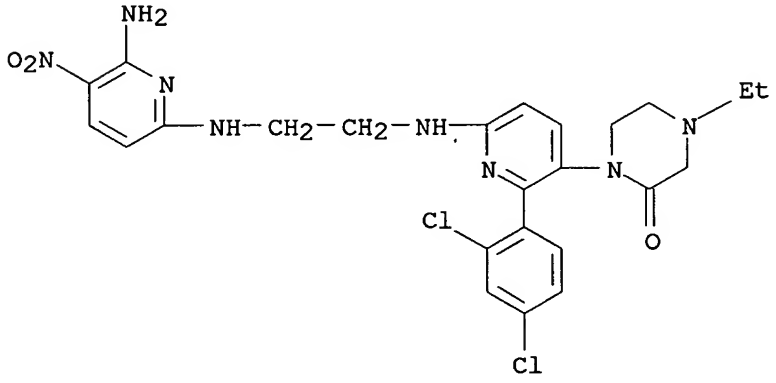


RN 403808-71-9 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-

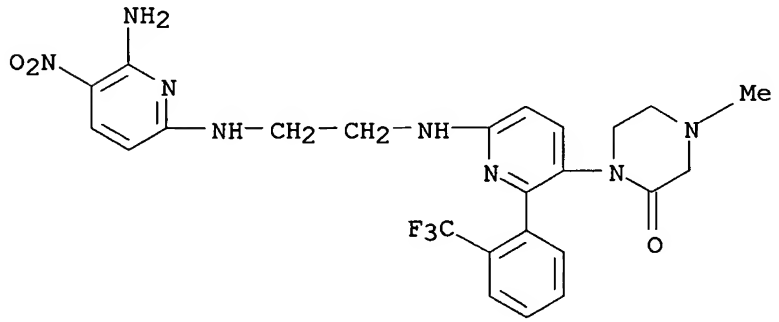
(2,4-dichlorophenyl)-3-pyridinyl]-4-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 403808-72-0 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-ethyl- (9CI) (CA INDEX NAME)

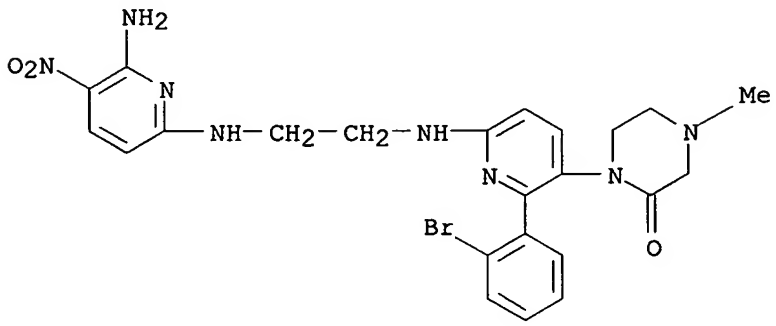


RN 403808-73-1 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-[2-(trifluoromethyl)phenyl]-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

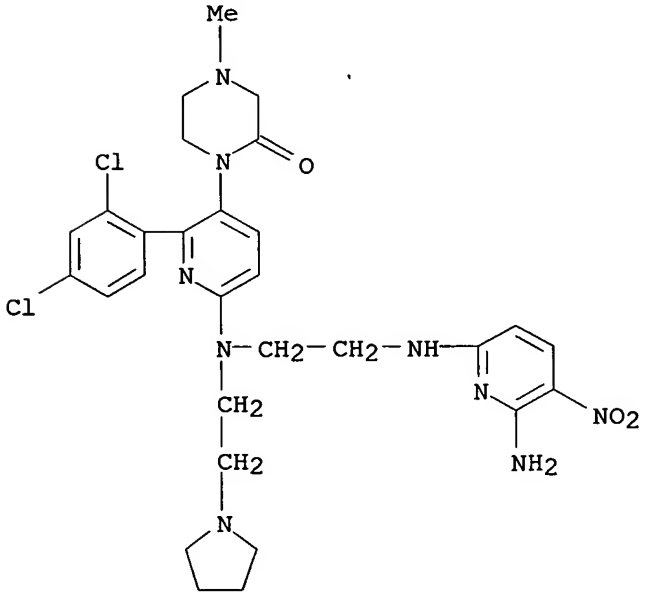


RN 403808-74-2 CAPLUS

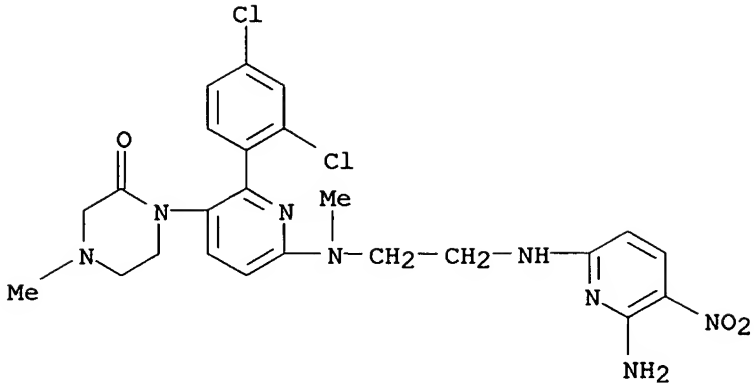
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2-bromophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



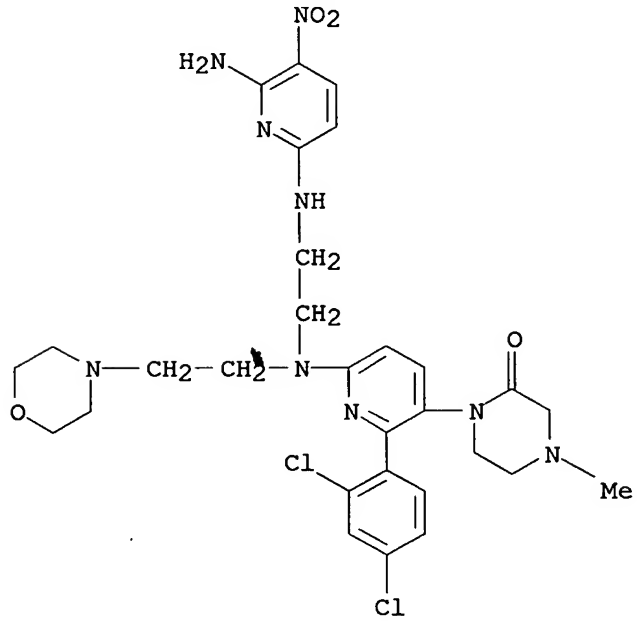
RN 403808-79-7 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl][2-(1-pyrrolidinyl)ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403808-81-1 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]methylamino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403808-84-4 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl][2-(4-morpholinyl)ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403808-85-5 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)

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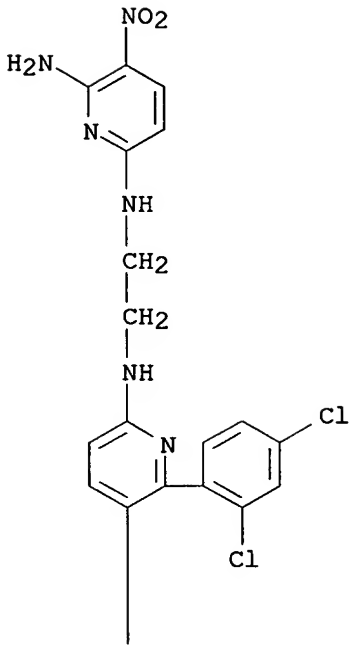

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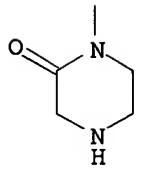
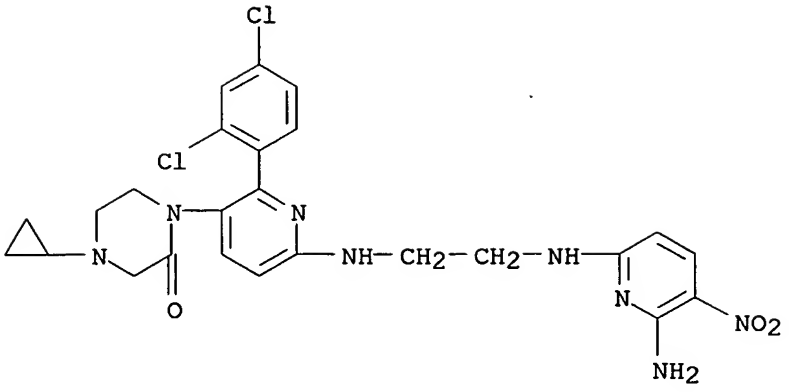
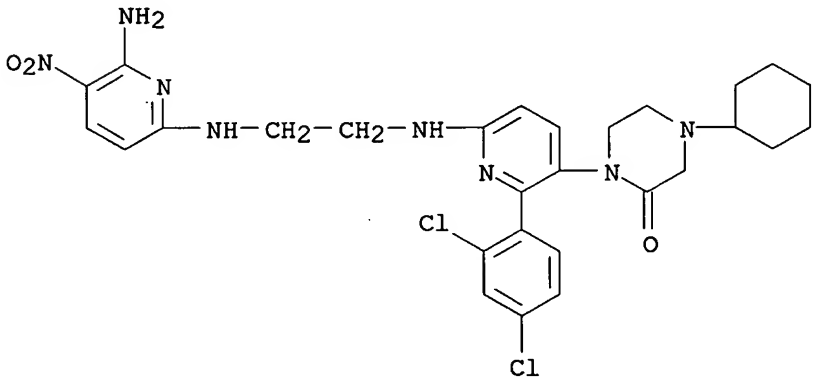


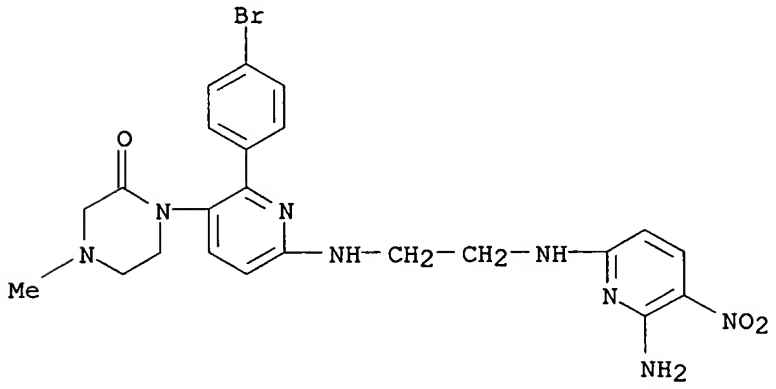
RN 403808-86-6 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-cyclopropyl- (9CI) (CA INDEX NAME)



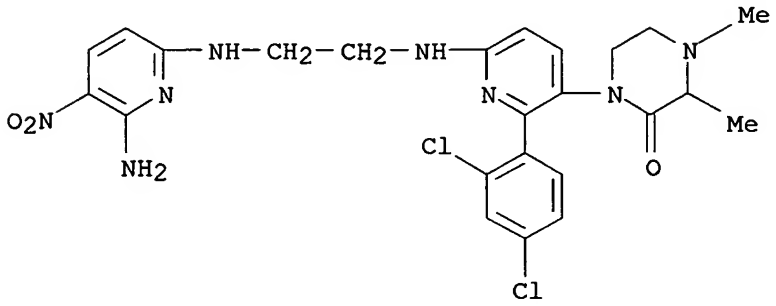
RN 403808-87-7 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-cyclohexyl- (9CI) (CA INDEX NAME)



RN 403808-88-8 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(4-bromophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403808-89-9 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-3,4-dimethyl- (9CI) (CA INDEX NAME)



RN 403808-90-2 CAPLUS
CN Piperazinone, 1-[2-(2,4-dichlorophenyl)-6-[[2-[(6-methoxy-5-nitro-2-pyridinyl)amino]ethyl]amino]-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

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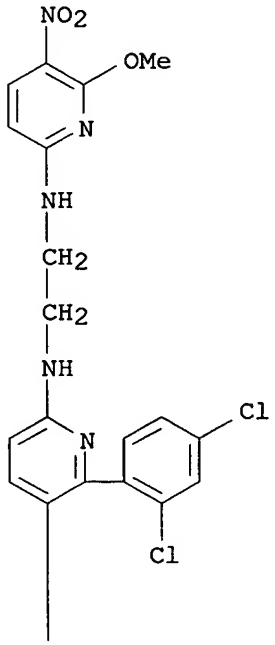

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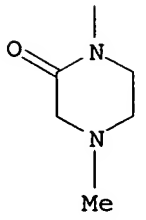

RN 403808-91-3 CAPLUS
CN Piperazinone, 1-[2-(2,4-dichlorophenyl)-6-[[2-[(5-nitro-2-pyridinyl)amino]ethyl]amino]-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

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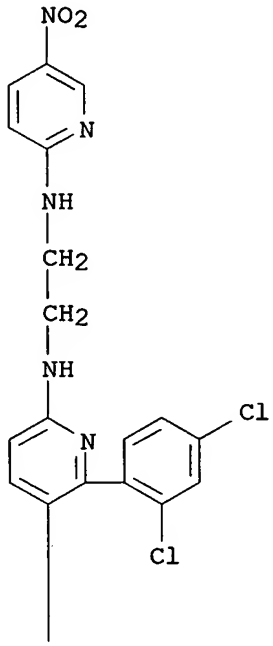

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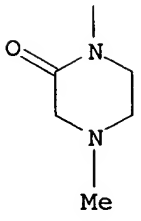
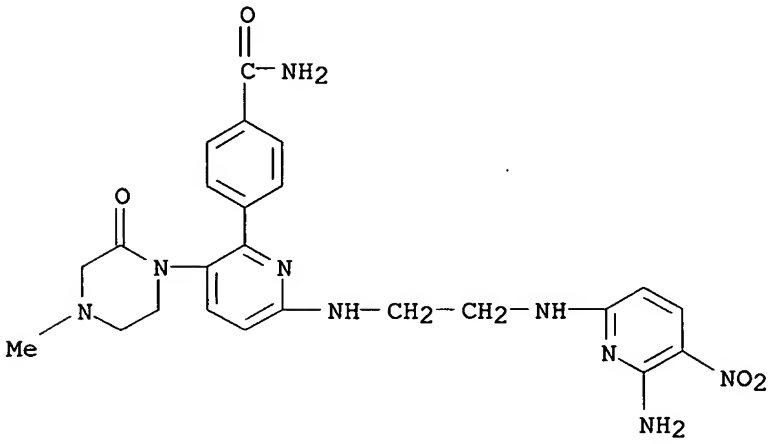
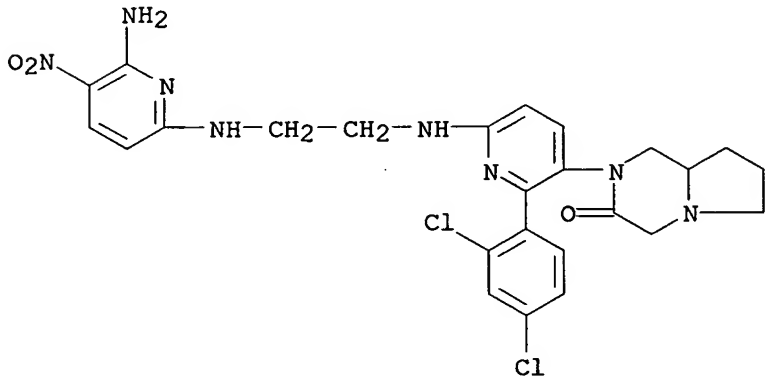


RN 403808-92-4 CAPLUS

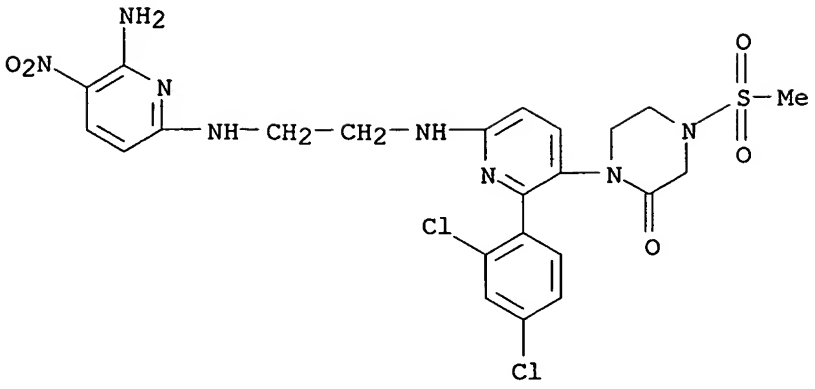
CN Benzamide, 4-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-3-(4-methyl-2-oxo-1-piperazinyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)



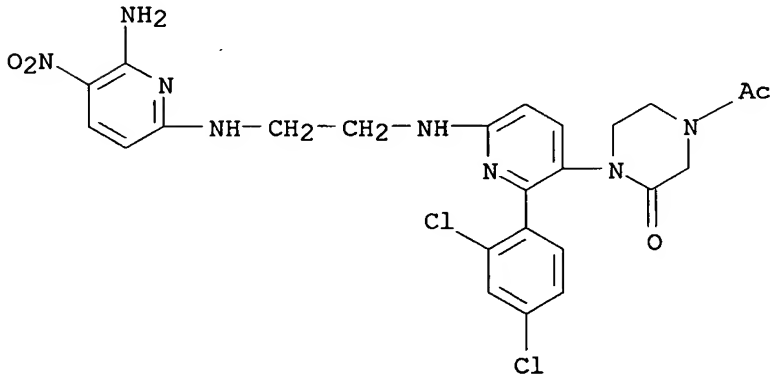
RN 403808-93-5 CAPLUS
CN Pyrrolo[1,2-a]pyrazin-3(4H)-one, 2-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]hexahydro- (9CI) (CA INDEX NAME)



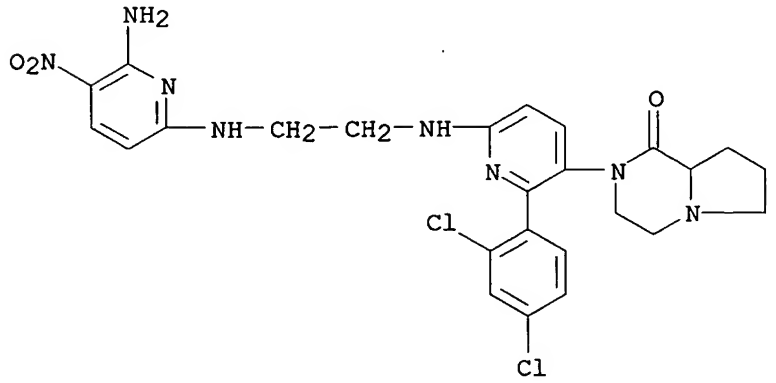
RN 403808-94-6 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-(methylsulfonyl)- (9CI) (CA INDEX NAME)



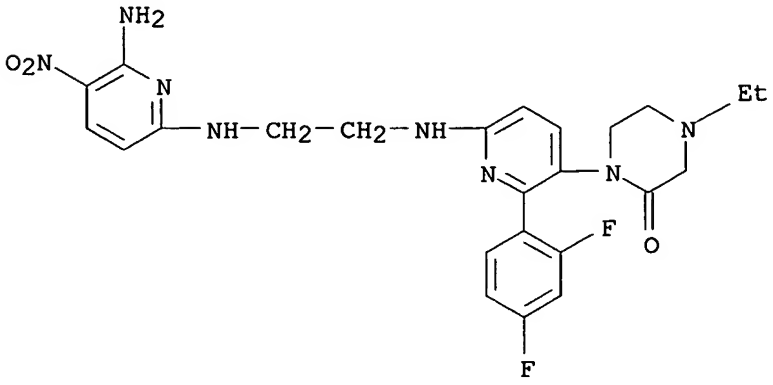
RN 403808-95-7 CAPLUS
CN Piperazinone, 4-acetyl-1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



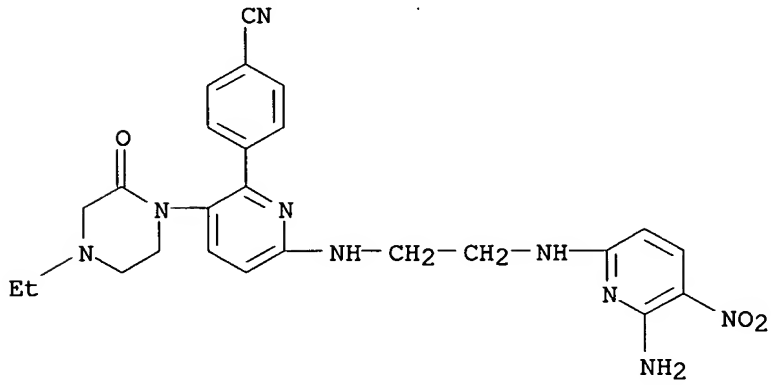
RN 403808-96-8 CAPLUS
CN Pyrrolo[1,2-a]pyrazin-1(2H)-one, 2-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]hexahydro- (9CI) (CA INDEX NAME)



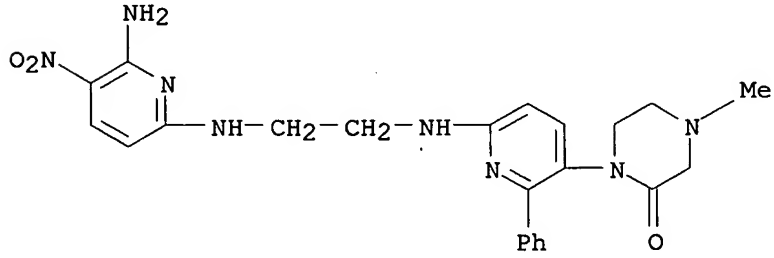
RN 403808-98-0 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-difluorophenyl)-3-pyridinyl]-4-ethyl- (9CI) (CA INDEX NAME)



RN 403809-00-7 CAPLUS
CN Benzonitrile, 4-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-3-(4-ethyl-2-oxo-1-piperazinyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)

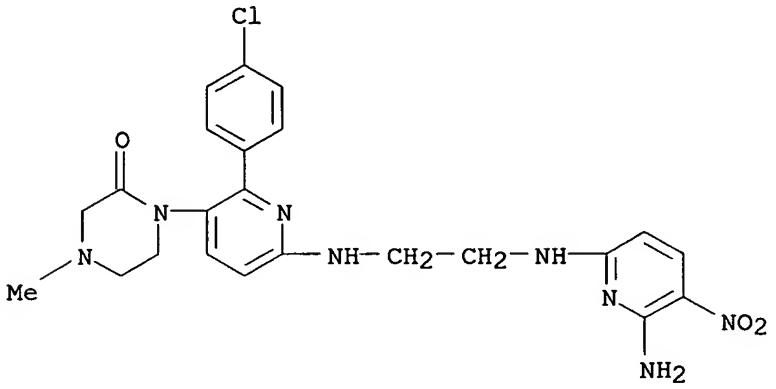


RN 403809-02-9 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-phenyl-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

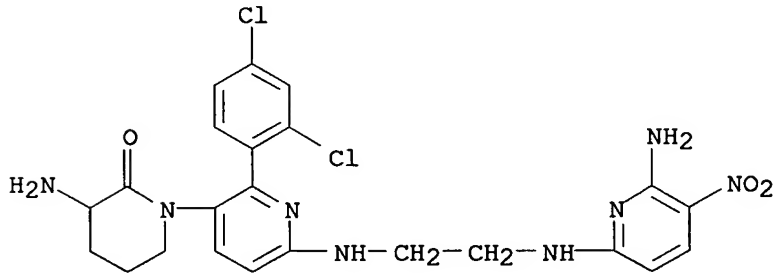


RN 403809-03-0 CAPLUS

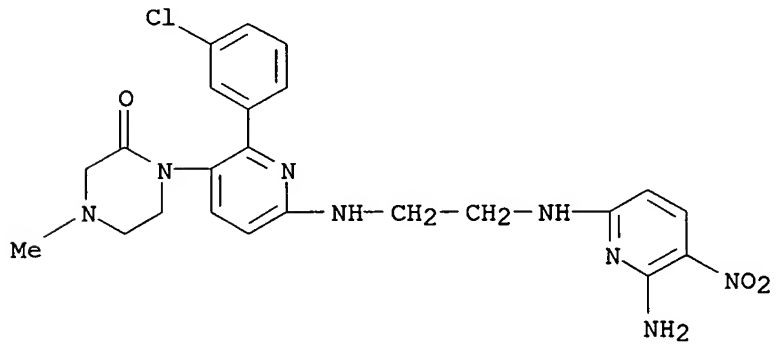
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(4-chlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403809-04-1 CAPLUS
CN 2-Piperidinone, 3-amino-1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)



RN 403809-05-2 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(3-chlorophenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403809-06-3 CAPLUS

CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenoxy)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)

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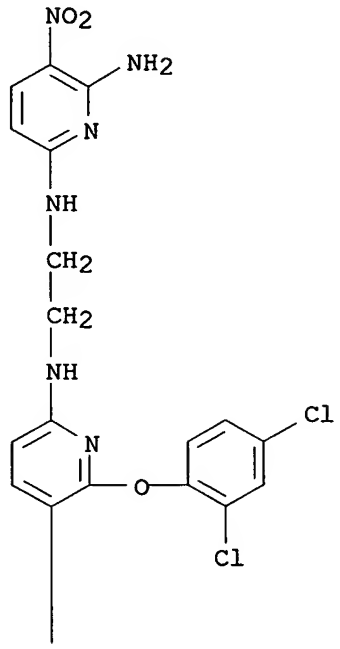


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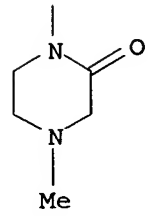
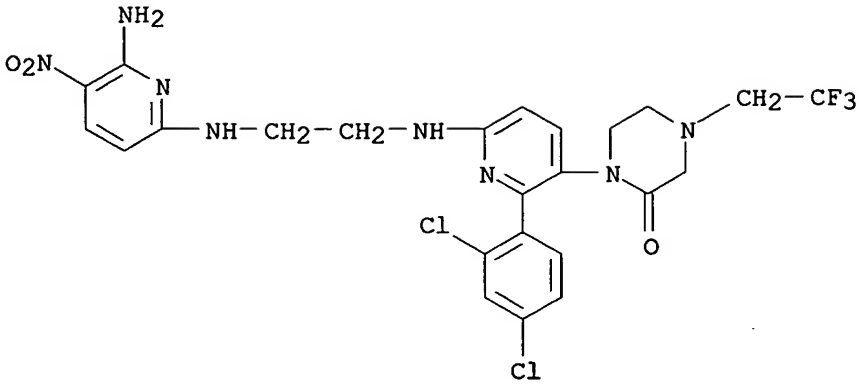


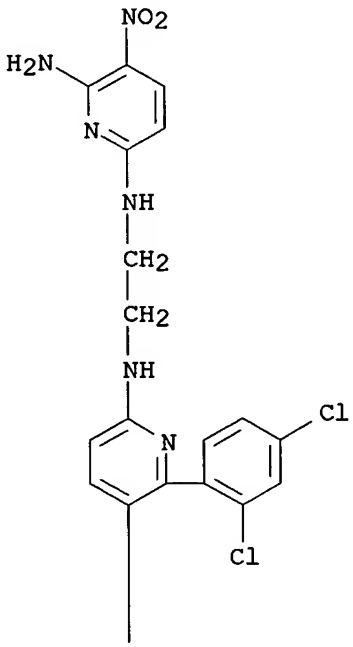

RN 403809-07-4 CAPLUS

CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]-4-(2,2,2-trifluoroethyl)- (9CI) (CA INDEX NAME)



RN 403809-08-5 CAPLUS
CN 3-Morpholinone, 4-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



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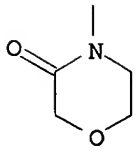
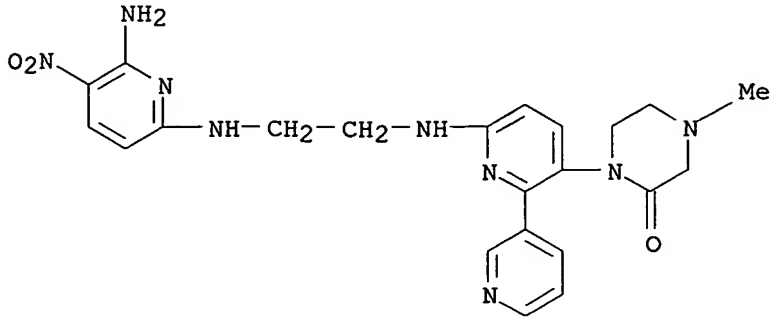
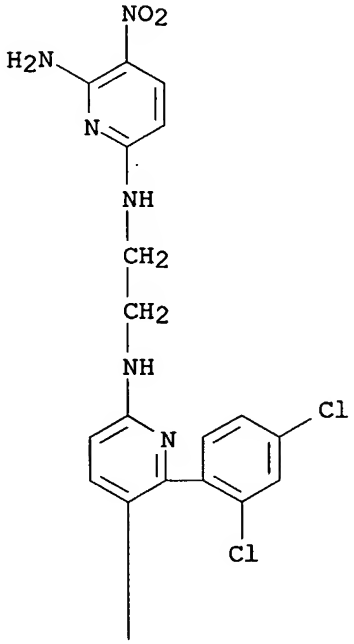


RN 403809-09-6 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino][2,3'-bipyridin]-3-yl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403809-10-9 CAPLUS
CN 2-Piperidinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(2,4-dichlorophenyl)-3-pyridinyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



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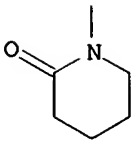
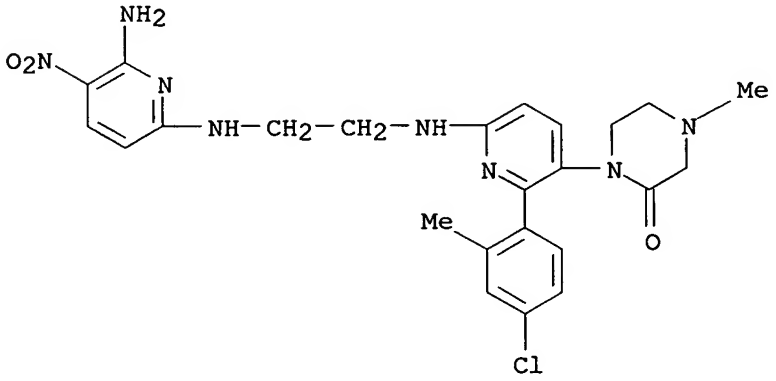
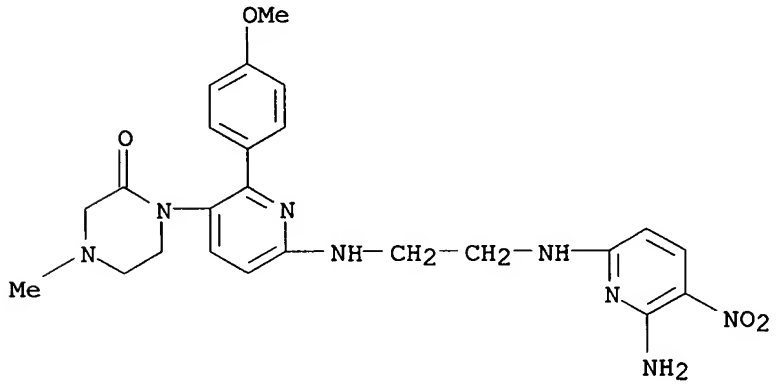


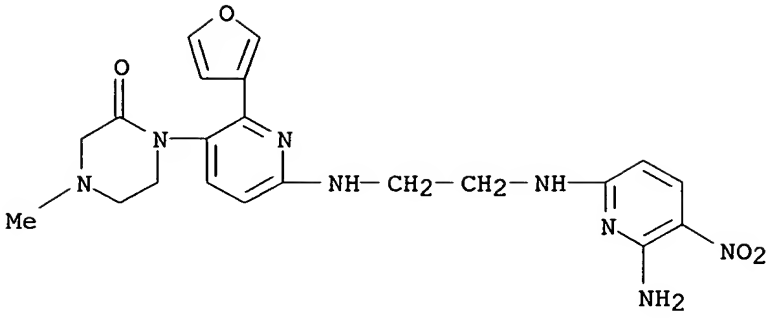
RN 403809-11-0 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(4-chloro-2-methylphenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403809-12-1 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(4-methoxyphenyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 403809-13-2 CAPLUS
CN Piperazinone, 1-[6-[[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]amino]-2-(3-furanyl)-3-pyridinyl]-4-methyl- (9CI) (CA INDEX NAME)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L13 ANSWER 13 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:811233 CAPLUS
DOCUMENT NUMBER: 132:64265
TITLE: Preparation of aminopyrimidines and -pyridines as glycogen synthase kinase 3 inhibitors
INVENTOR(S): Nuss, John M.; Harrison, Stephen D.; Ring, David B.; Boyce, Rustum S.; Brown, Sean P.; Goff, Dane; Johnson, Kirk; Pfister, Keith B.; Ramurthy, Savithry; Renhowe, Paul A.; Seely, Lynn; Subramanian, Sharadha; Wagman, Allan S.; Zhou, Xiaohui A.
PATENT ASSIGNEE(S): Chiron Corporation, USA
SOURCE: PCT Int. Appl., 262 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9965897 | A1 | 19991223 | WO 1999-US13809 | 19990618 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
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| US 6489344 | B1 | 20021203 | US 1999-336098 | 19990618 |
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| US 2003130289 | A1 | 20030710 | US 2002-309535 | 20021203 |

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| PRIORITY APPLN. INFO.: | US 1998-89978P | P | 19980619 |
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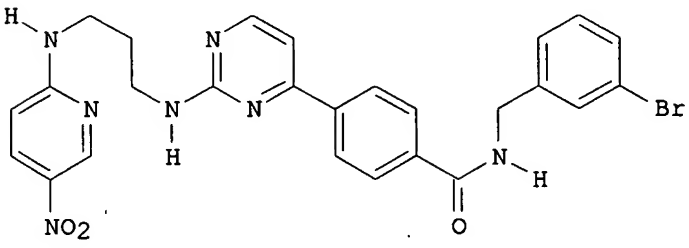
| | WO 1999-US13809 | W | 19990618 |

OTHER SOURCE(S): MARPAT 132:64265
GI



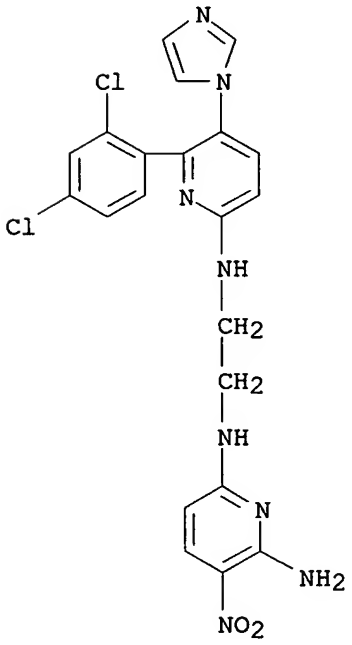

II

AB RZCR2R12CR3R13Z1R5 [I; R = (un)substituted (hetero)aryl; Z = O, NR1, CR1R11; Z1 = O, NR4, CR4R14; R1-R4 = H, OH, NH2, alkyl, alkoxy, etc.; R5 = (un)substituted 2-pyridyl or -pyrimidyl; R11-R14 = H or alkyl] were prepared Thus, 2-chloro-5-nitropyridine was aminated by H2N(CH2)3NH2 and the product N-acylated by benzotriazolecarboxamidinium tosylate to give the alkylguanidine which was cyclocondensed with resin-bound 4-(MeCO)C6H4CONHCH2C6H4Br-3 and Cs2CO3 to give, after resin cleavage, title compound II. Data for biol. activity of I were given.

IT **252917-05-8P 252936-05-3P 252938-13-9P**
**252942-25-9P 252942-26-0P 252942-30-6P**
**252942-34-0P 252942-35-1P 252942-37-3P**
**252942-38-4P 252942-39-5P 252942-40-8P**
**252942-41-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aminopyrimidines and -pyridines as glycogen synthase kinase 3 inhibitors)

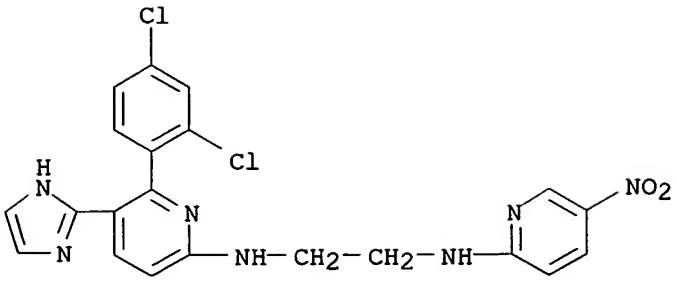
RN 252917-05-8 CAPLUS

CN 2,6-Pyridinediamine, N6-[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]-3-nitro- (9CI) (CA INDEX NAME)

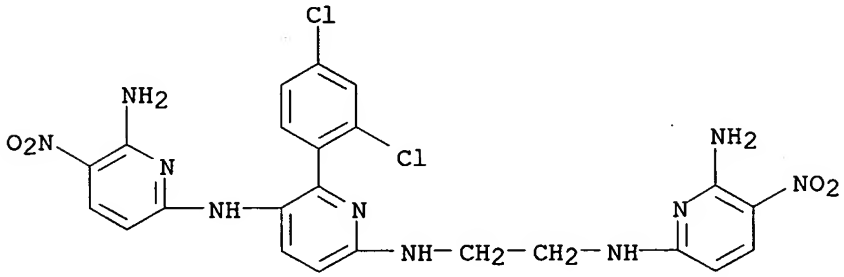



RN 252936-05-3 CAPLUS

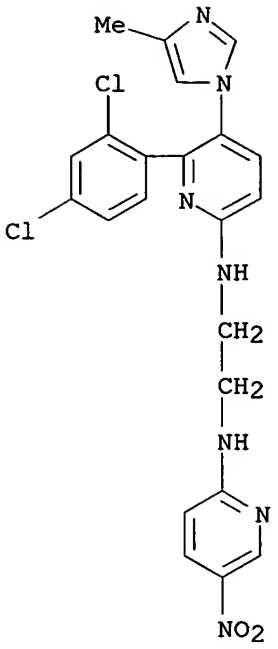
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)



RN 252938-13-9 CAPLUS
CN 2,5-Pyridinediamine, N5-(6-amino-5-nitro-2-pyridinyl)-N2-[2-[(6-amino-5-nitro-2-pyridinyl)amino]ethyl]-6-(2,4-dichlorophenyl)- (9CI) (CA INDEX NAME)



RN 252942-25-9 CAPLUS
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)



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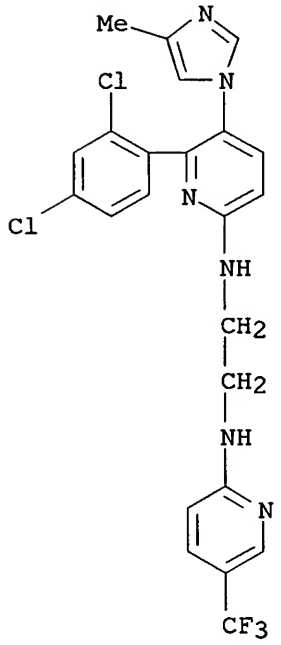
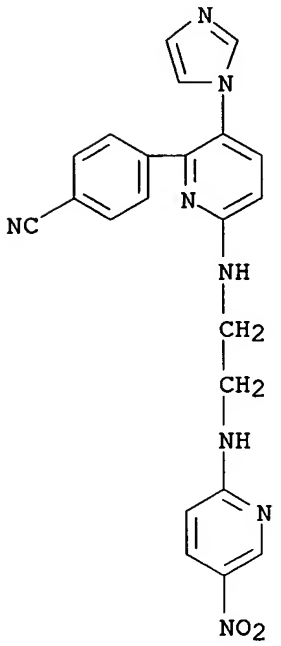
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]-N'-[5-(trifluoromethyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)

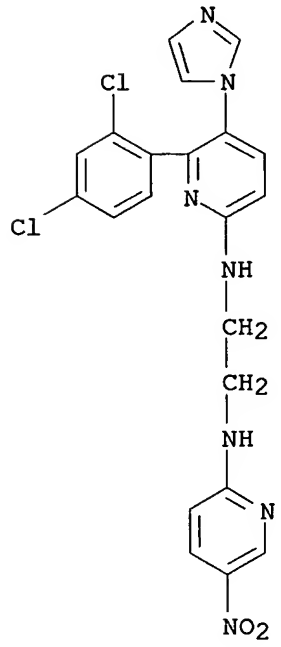


RN 252942-30-6 CAPLUS
CN Benzonitrile, 4-[3-(1H-imidazol-1-yl)-6-[[2-[(5-nitro-2-

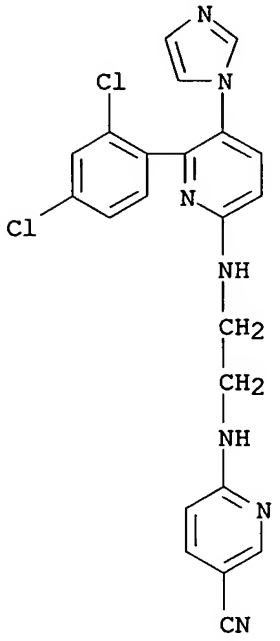
pyridinyl)amino]ethyl]amino]-2-pyridinyl]- (9CI) (CA INDEX NAME)



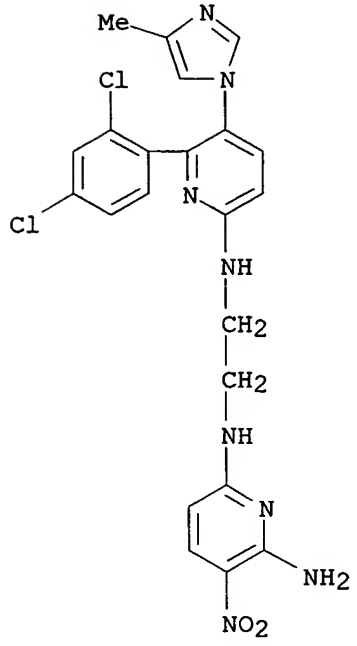
RN 252942-34-0 CAPLUS
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]-N'-(5-nitro-2-pyridinyl)- (9CI) (CA INDEX NAME)



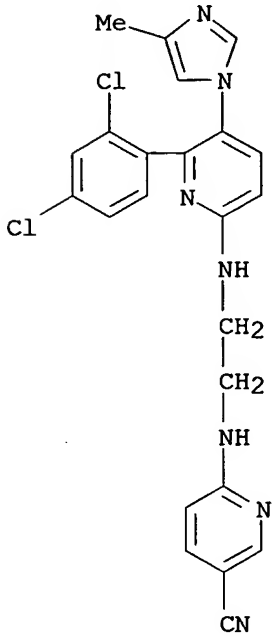
RN 252942-35-1 CAPLUS
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)



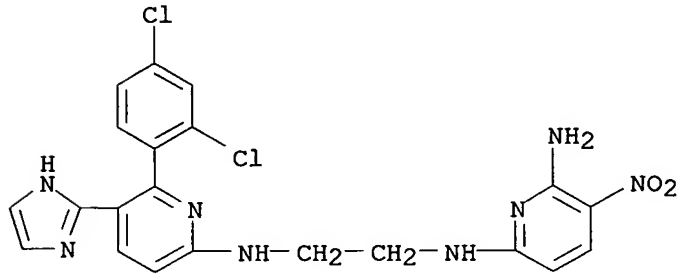
RN 252942-37-3 CAPLUS
CN 2,6-Pyridinediamine, N6-[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]-3-nitro- (9CI) (CA INDEX NAME)



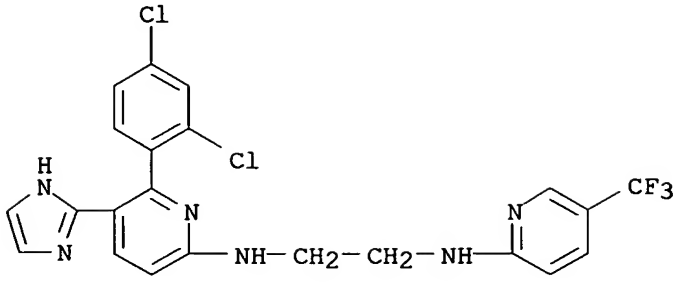
RN 252942-38-4 CAPLUS
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(4-methyl-1H-imidazol-1-yl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)



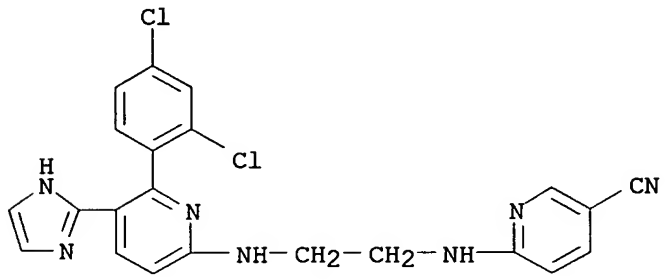
RN 252942-39-5 CAPLUS
CN 1,2-Ethanediamine, N-(6-amino-5-nitro-2-pyridinyl)-N'-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]- (9CI) (CA INDEX NAME)



RN 252942-40-8 CAPLUS
CN 1,2-Ethanediamine, N-[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]-N'-[5-(trifluoromethyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)



RN 252942-41-9 CAPLUS
CN 3-Pyridinecarbonitrile, 6-[[2-[[6-(2,4-dichlorophenyl)-5-(1H-imidazol-2-yl)-2-pyridinyl]amino]ethyl]amino]- (9CI) (CA INDEX NAME)

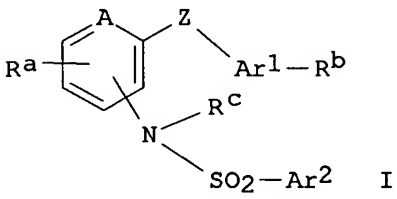


REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 14 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:640827 CAPLUS
DOCUMENT NUMBER: 131:267057
TITLE: Sulfonamide derivatives and drugs containing the same as the active ingredient
INVENTOR(S): Hidaka, Hiroyoshi; Inoue, Tsutomu; Umezawa, Isao; Nakano, Hiroyuki; Nakamura, Hiroshi; Watanabe, Naofumi; Yokota, Shizumasa; Sasaki, Tomomitsu; Yajima, Yumi
PATENT ASSIGNEE(S): Japan
SOURCE: PCT Int. Appl., 103 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9950237 | A1 | 19991007 | WO 1999-JP1621 | 19990330 |
| W: CA, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| JP 11279138 | A2 | 19991012 | JP 1998-83804 | 19980330 |
| CA 2325997 | AA | 19991007 | CA 1999-2325997 | 19990330 |
| EP 1072587 | A1 | 20010131 | EP 1999-910769 | 19990330 |
| R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE | | | | |
| US 6403607 | B1 | 20020611 | US 2000-647533 | 20001002 |
| PRIORITY APPLN. INFO.: | | | JP 1998-83804 A | 19980330 |
| | | | WO 1999-JP1621 W | 19990330 |

OTHER SOURCE(S): MARPAT 131:267057
GI



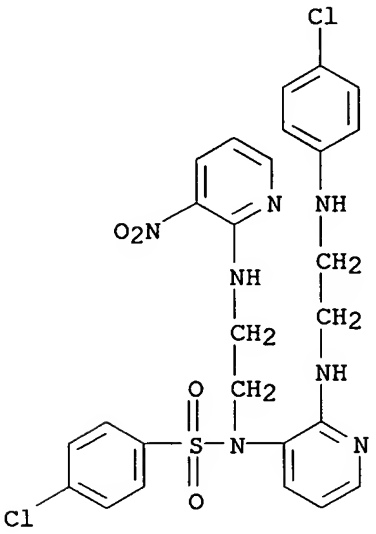
I

AB Sulfonamide derivs. represented by general formula (I) or salts thereof, wherein A represents nitrogen, -CH=, etc.; Z represents oxygen, etc.; Ar1 represents aryl, etc.; Ar2 represents alkyl, etc.; Ra represents hydrogen, etc.; Rb represents halogeno, etc.; and Rc represents alkyl, etc. Because of having radical-scavenging effect, gastric secretion-potentiating effect, anti-HP bacterial effect, etc., these compds. are useful as remedies for peptic ulcer.

IT **245649-33-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(sulfonamide derivs. and antiulcer drugs containing the same as the active ingredient)

RN 245649-33-6 CAPLUS

CN Benzenesulfonamide, 4-chloro-N-[2-[[2-[(4-chlorophenyl)amino]ethyl]amino]-3-pyridinyl]-N-[2-[(3-nitro-2-pyridinyl)amino]ethyl]- (9CI) (CA INDEX NAME)



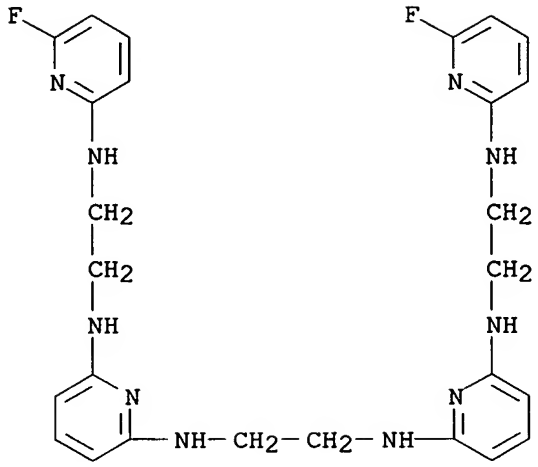
REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 15 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:49517 CAPLUS
DOCUMENT NUMBER: 128:180392
TITLE: Linear and macrocyclic ligands containing alternating pyridine and imidazolidin-2-one units
AUTHOR(S): Meth-Cohn, Otto; Yan, Zegui
CORPORATE SOURCE: Chemistry Department, Sunderland University, Sunderland, SR1 3SD, UK
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1998), (3), 423-436
CODEN: JCPRB4; ISSN: 0300-922X
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

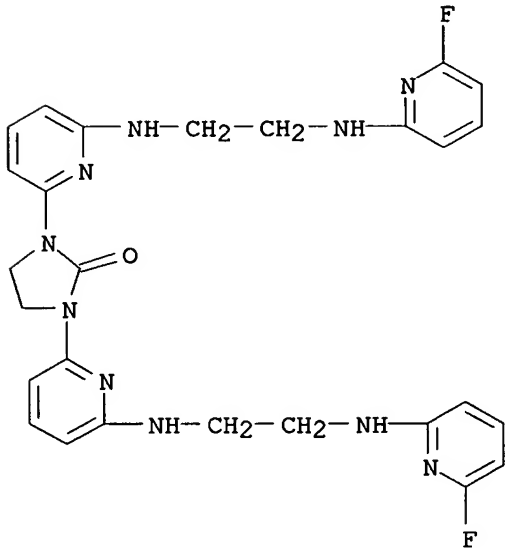
AB Linear oligomers of alternating 2,6-disubstituted pyridine (P) and N,N'-disubstituted imidazolidine-2-one units (I) with up to nine repeating units, terminating in either pyridine or imidazolidin-2-one units, or one of each, were made rapidly and in high yield. Synthetic methods include: the sodium hydride-mediated condensation of N-(tert-butyl)imidazolidin-2-one with 2,6-difluoropyridine (F-P-F) or with higher analogs such as F-PIP-F, to give IPI, IPIPI and IPIPIPI. The tert-Bu protective group was readily and quant. removed with acid. Another synthetic method comprises the cesium fluoride catalyzed interaction of N,N'-[dimethyl-(1,1,3-trimethylpropyl)]-protected IPI with tert-Bu-IP-F; it sequentially leads first to IPIPIPI which by the same method reacts with F-P-F to give F-PIPIPIPIP-F. F-P-F also reacts with 1,2-ethylenediamine (E) sequentially to give F-PEP-F, EPEPE and F-PEPEPEP-F while similar reactions starting from F-PIP-F give EPIPE and F-PEPIPEP-F in sequence. Alternative routes examined were the interaction of F-P-F with imidazole to give 2,6-bis(imidazol-1-yl)pyridine and salts therefrom followed by (unsuccessful) oxidation and the reaction of 2,6-diaminopyridine with 2-chloroethyl isocyanate followed by cyclization to give IPI. The interaction of 2,6-diaminopyridine with oxalate esters (O) gave OPO or H2N-POP-NH2, the latter of which was reduced to H2N-PEP-NH2. Cyclization of the linear assemblies was not successful. However macrocyclic systems were made by linking two IPI units with two ethoxyethyl or with two ethoxyethoxyethyl units. Also two F-PIP-F units were similarly reacted to give polyether-linked macrocycles. Mono- and bis-prop-2-ynylated IPI derivs. were made but could not be cyclized. Attempts to cyclize ethylenediamine and oxamide based systems were also unsuccessful. The linear and macrocyclic ligands showed calcium selectivity in a study of their metal complexing abilities.

IT **203303-23-5P 203303-25-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of linear and macrocyclic ligands containing alternating pyridine and imidazolidinone units)

RN 203303-23-5 CAPLUS
CN 2,6-Pyridinediamine, N,N''-1,2-ethanediylbis[N'-[2-[(6-fluoro-2-pyridinyl)amino]ethyl]- (9CI) (CA INDEX NAME)



RN 203303-25-7 CAPLUS
CN 1,2-Ethanediamine, N,N''-[(2-oxo-1,3-imidazolidinediyl)di-6,2-pyridinediyl]bis[N'-(6-fluoro-2-pyridinyl)- (9CI) (CA INDEX NAME)



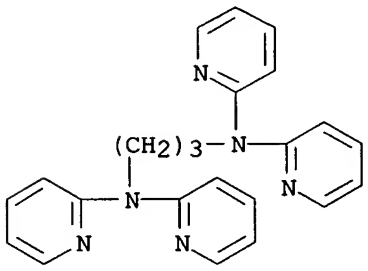
REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 16 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:618987 CAPLUS
DOCUMENT NUMBER: 125:328464
TITLE: The Synthesis of Aminopyridines: A Method Employing Palladium-Catalyzed Carbon-Nitrogen Bond Formation
AUTHOR(S): Wagaw, Seble; Buchwald, Stephen L.
CORPORATE SOURCE: Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA, 02139, USA
SOURCE: Journal of Organic Chemistry (1996), 61(21), 7240-7241
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 125:328464

AB Aminopyridines are efficiently synthesized under mild conditions by the cross coupling reaction of 2-, 3-, and 4-bromopyridines with primary and secondary amines utilizing palladium(0) complexes with chelating bis(phosphine) ligands. A variety of aminopyridines were prepared including mono-, di-, tri-, and tetra-pyridinylated products.

IT **183135-56-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of aminopyridines by palladium-catalyzed cross coupling of bromopyridines with amines)

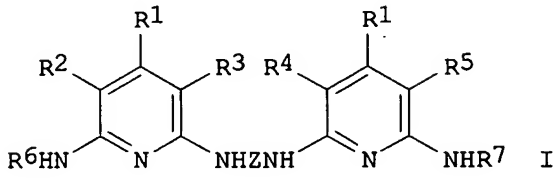
RN 183135-56-0 CAPLUS
CN 1,3-Propanediamine, N,N,N',N'-tetra-2-pyridinyl- (9CI) (CA INDEX NAME)



L13 ANSWER 17 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:693193 CAPLUS
DOCUMENT NUMBER: 123:115325
TITLE: Reactive azo dye mixtures and their use
INVENTOR(S): Tzikas, Athanassios; Carisch, Claudia
PATENT ASSIGNEE(S): Ciba-Geigy Corp., USA
SOURCE: U.S., 21 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 5393306 | A | 19950228 | US 1993-94644 | 19930719 |
| PRIORITY APPLN. INFO.: | | | US 1993-94644 | 19930719 |

OTHER SOURCE(S): MARPAT 123:115325
GI



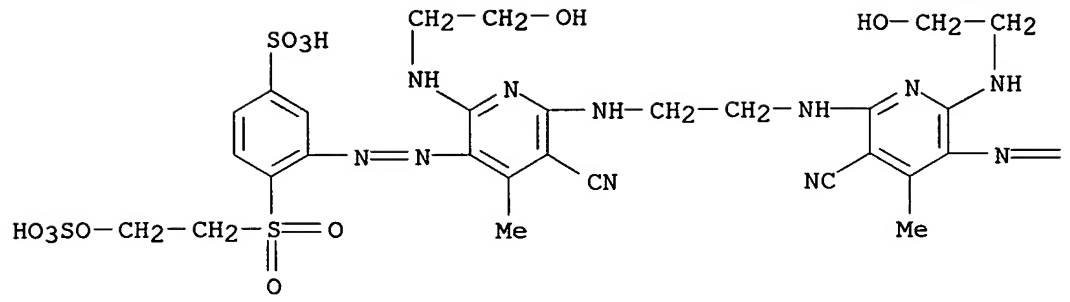
I

AB Mixts. of dye isomers I [R1 = C1-4 alkyl; R2 or R3, R4 or R5 = CN, CONH2, CH2SO3H; R2 or R3, R4 or R5 = N:NX; R6, R7 = H, (un)substituted C1-12 alkyl; X = residue of a diazo component or amino azo compound having a fiber-reactive substituent; Z = (un)substituted and (un)interrupted by O C2-12 alkylene] (II) are particularly suitable for dyeing or printing cellulosic fiber materials or natural or synthetic polyamide fiber materials with a high tinctorial yield, and produce dyeings and prints having good fastness properties. Thus, 1:1 condensation of 2,6-dichloro-3-cyano-4-methylpyridine with HOCH2CH2NH2 gave a 3:1 mixture of 6- and 2-hydroxyethylamino isomers, which was condensed with H2N(CH2)3NH2 to give a 60:35:5 mixture in which the predominant isomer was I [R1 = Me, R2 = R5 = H, R3 = R4 = CN, R6 = R7 = CH2CH2OH, Z = (CH2)3]. The analogous mixture with Z = (CH2)2 was coupled with diazotized 2,4-H2N(HO3S)C6H3SO2CH2CH2OSO3H to give a II mixture which dyed cotton and wool in fast brilliant orange shades.

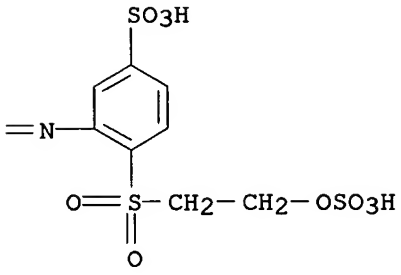
IT **154196-45-9P 154196-46-0P 154196-47-1P**
**155952-36-6P 155952-37-7P 155952-38-8P**
**155952-44-6P 155952-45-7P 155952-46-8P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(mixts. containing, orange; preparation of reactive azo dye mixts. for cotton and wool)

RN 154196-45-9 CAPLUS
CN Benzenesulfonic acid, 3,3'-[1,2-ethanediylbis[imino[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[4-[[2-(sulfooxy)ethyl]sulfonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

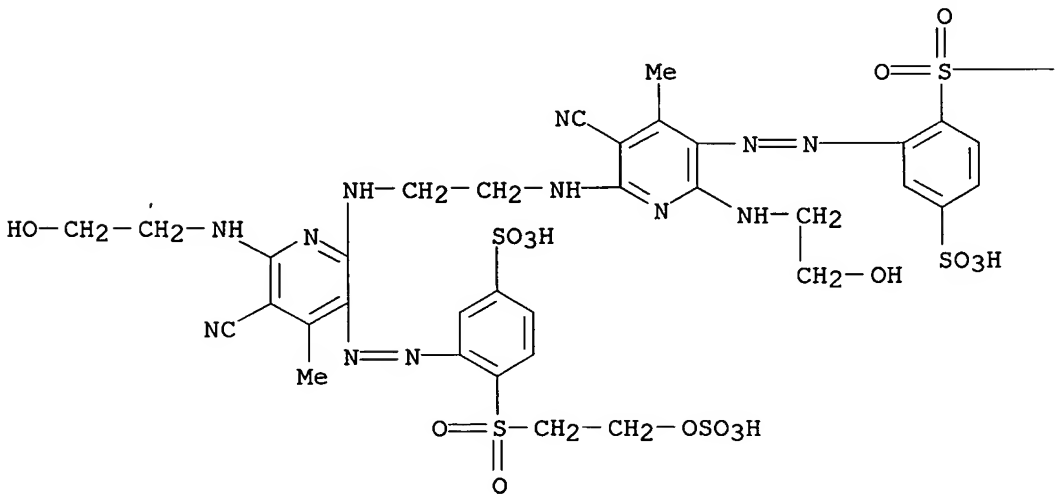


PAGE 1-B

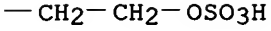


RN 154196-46-0 CAPLUS
CN Benzenesulfonic acid, 3-[[5-cyano-6-[[2-[[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-3-[[5-sulfo-2-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]azo]-2-pyridinyl]amino]ethyl]amino]-2-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinyl]azo]-4-[[2-(sulfooxy)ethyl]sulfonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

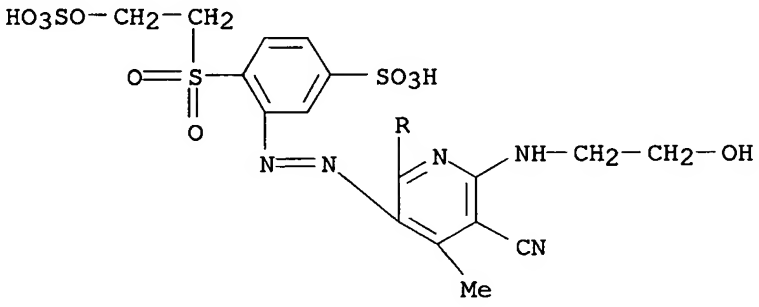


PAGE 1-B

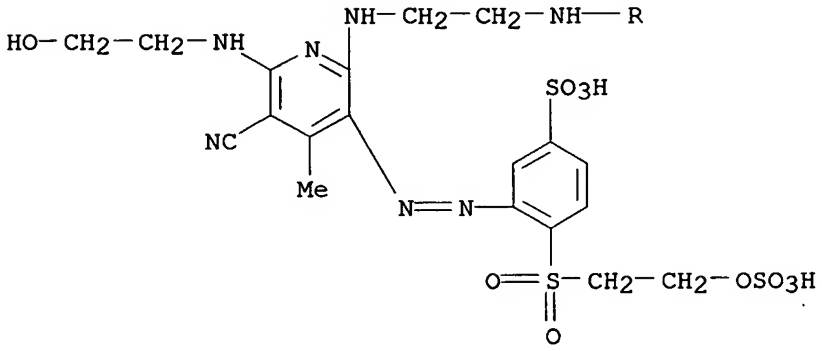


RN 154196-47-1 CAPLUS
CN Benzenesulfonic acid, 3,3'-[1,2-ethanediylbis[imino[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]]bis[4-[[2-(sulfooxy)ethyl]sulfonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

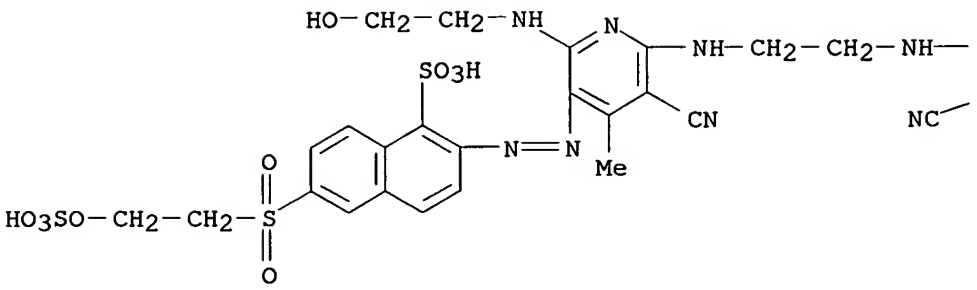


PAGE 2-A

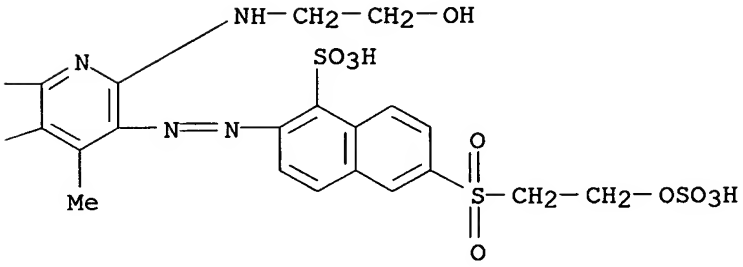


RN 155952-36-6 CAPLUS
CN 1-Naphthalenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[6-[[2-(sulfooxy)ethyl]sulfonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

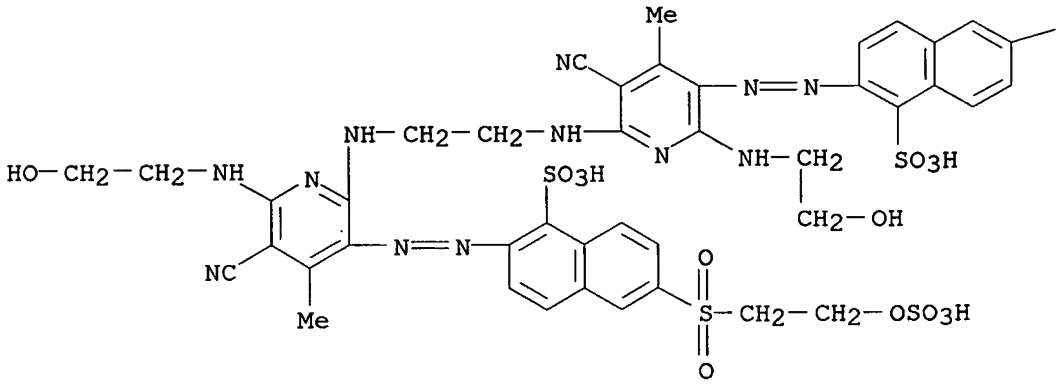


PAGE 1-B

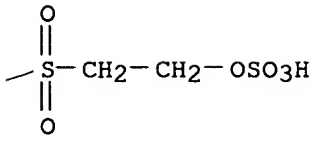


RN 155952-37-7 CAPLUS
CN 1-Naphthalenesulfonic acid, 2-[[5-cyano-2-[[2-[[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-5-[[1-sulfo-6-[[2-(sulfooxy)ethyl]sulfonyl]-2-naphthalenyl]azo]-2-pyridinyl]amino]ethyl]amino]-6-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinyl]azo]-6-[[2-(sulfooxy)ethyl]sulfonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

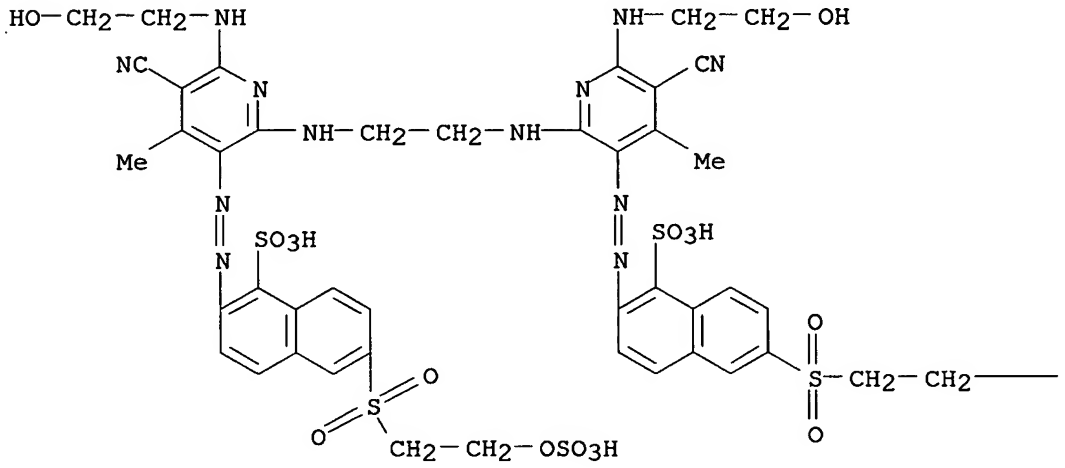


PAGE 1-B

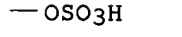


RN 155952-38-8 CAPLUS
CN 1-Naphthalenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]]bis[6-[[2-(sulfooxy)ethyl]sulfonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

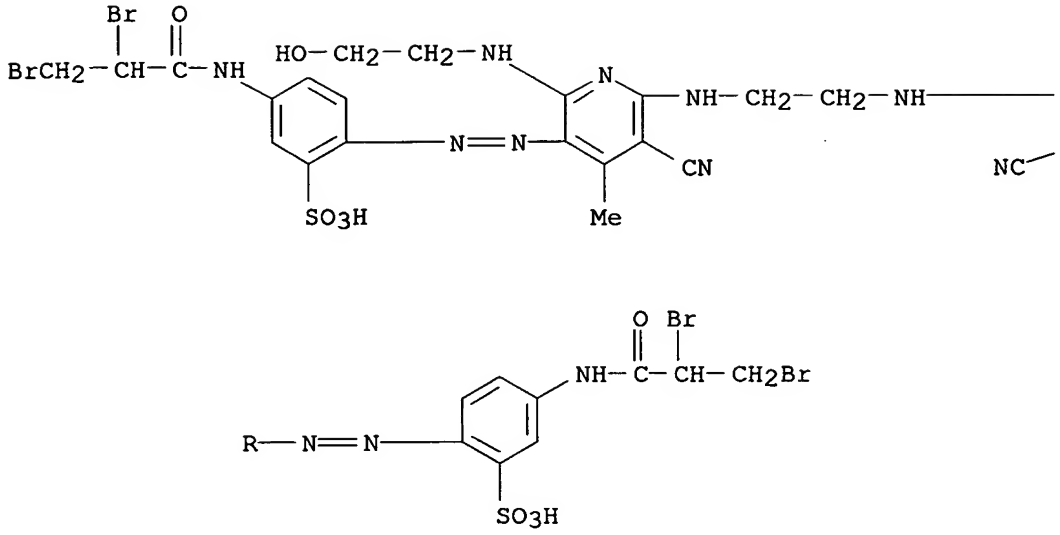


PAGE 1-B

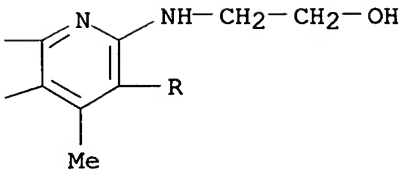


RN 155952-44-6 CAPLUS
CN Benzenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[5-[(2,3-dibromo-1-oxopropyl)amino]- (9CI) (CA INDEX NAME)

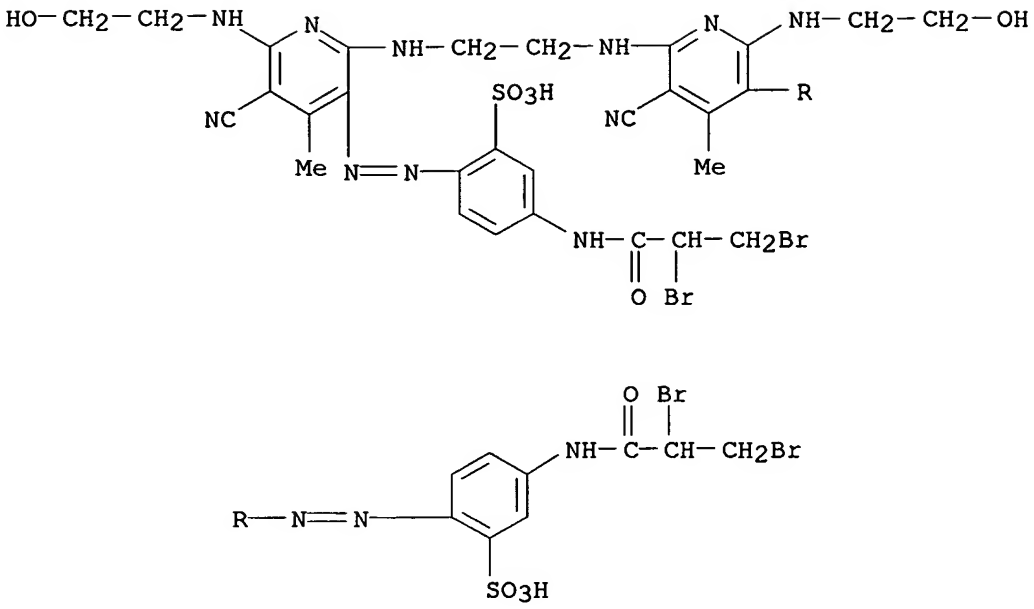
PAGE 1-A



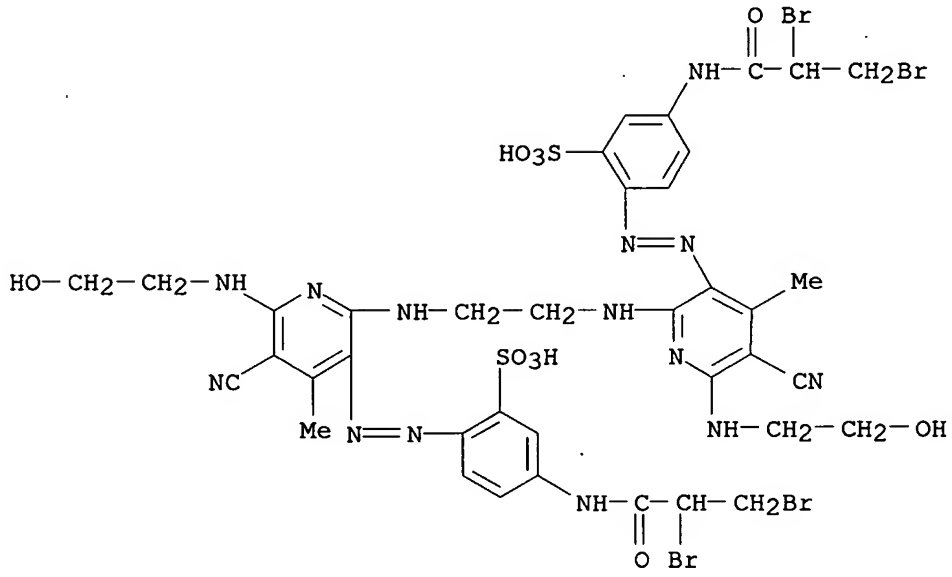
PAGE 1-B



RN 155952-45-7 CAPLUS
CN Benzenesulfonic acid, 2-[[5-cyano-2-[[2-[[3-cyano-5-[[4-[(2,3-dibromo-1-oxopropyl)amino]-2-sulfophenyl]azo]-6-[(2-hydroxyethyl)amino]-4-methyl-2-pyridinyl]amino]ethyl]amino]-6-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinyl]azo]-5-[(2,3-dibromo-1-oxopropyl)amino]- (9CI) (CA INDEX NAME)



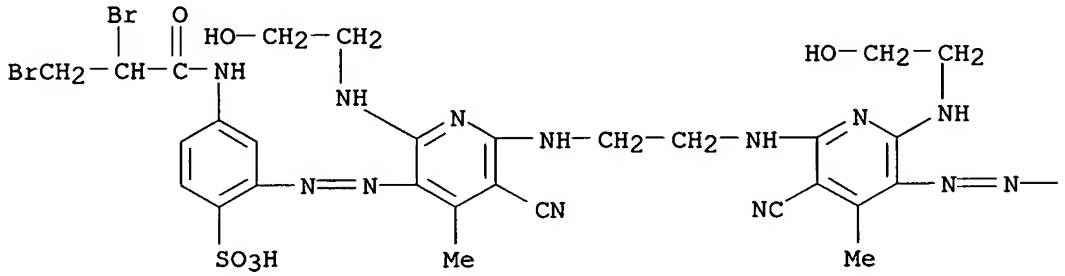
RN 155952-46-8 CAPLUS
CN Benzenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]]bis[5-[(2,3-dibromo-1-oxopropyl)amino]- (9CI) (CA INDEX NAME)



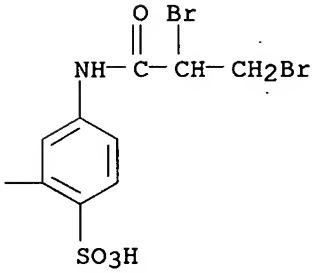
IT **155952-40-2P 155952-41-3P 155952-42-4P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(mixts. containing, yellow; preparation of reactive azo dye mixts. for cotton
and wool)
RN 155952-40-2 CAPLUS

CN Benzenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[4-[(2,3-dibromo-1-oxopropyl)amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



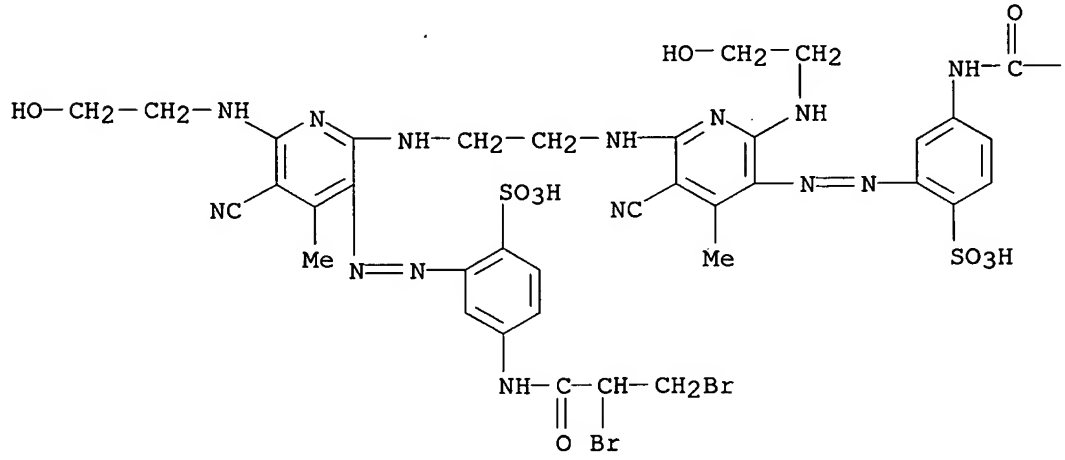
PAGE 1-B



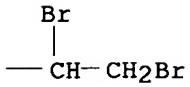
RN 155952-41-3 CAPLUS

CN Benzenesulfonic acid, 2-[[5-cyano-2-[[2-[[3-cyano-5-[[5-[(2,3-dibromo-1-oxopropyl)amino]-2-sulfophenyl]azo]-6-[(2-hydroxyethyl)amino]-4-methyl-2-pyridinyl]amino]ethyl]amino]-6-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinyl]azo]-4-[(2,3-dibromo-1-oxopropyl)amino]- (9CI) (CA INDEX NAME)

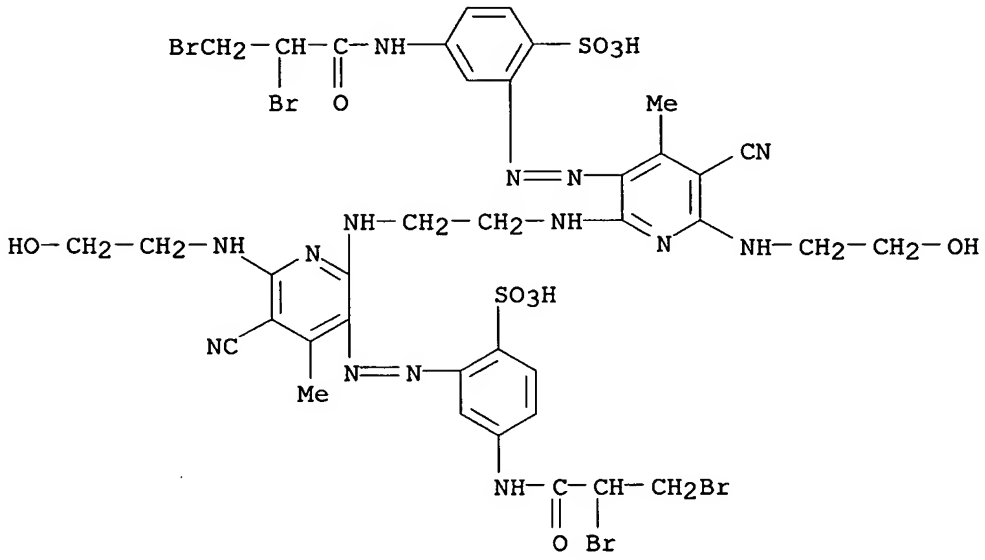
PAGE 1-A



PAGE 1-B



RN 155952-42-4 CAPLUS
CN Benzenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]]bis[4-[(2,3-dibromo-1-oxopropyl)amino]- (9CI) (CA INDEX NAME)



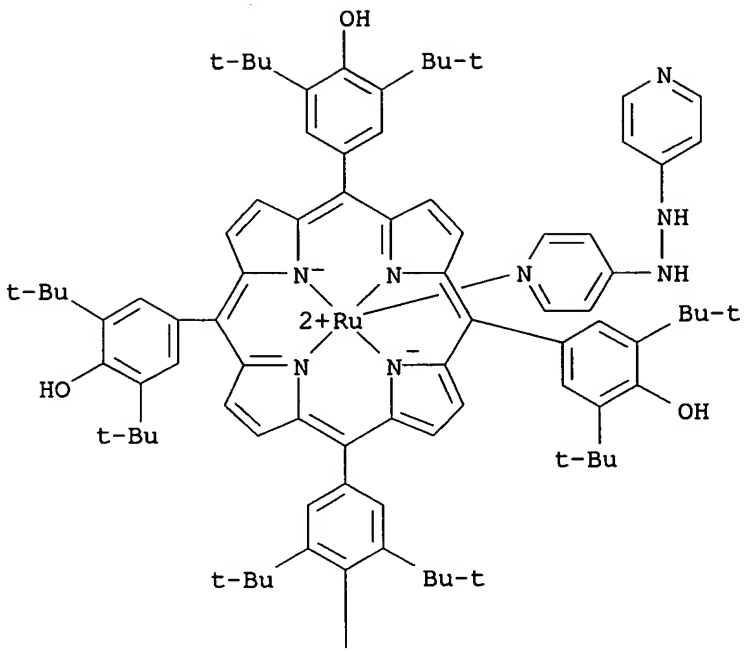
L13 ANSWER 18 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:252910 CAPLUS
DOCUMENT NUMBER: 122:226468
TITLE: Photophysical properties of monomeric and oligomeric ruthenium(II) porphyrins
AUTHOR(S): Ikonen, Marjo; Guez, David; Marvaud, Valerie; Markovitsi, Dimitra
CORPORATE SOURCE: Laboratoire de Photophysique et Photochimie, CEA-CNRS URA 331, Centre d'Etudes de Saclay, Gif-sur-Yvette, 91191, Fr.
SOURCE: Chemical Physics Letters (1994), 231(1), 93-7
CODEN: CHPLBC; ISSN: 0009-2614
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The present Letter deals with three ruthenium(II) porphyrins: RuTBP(CO)(EtOH), RuTBP(pyz)2 and [RuTBP(pyz)]n, where TBP = tetrakis(3,5-di-tert-butyl-4-hydroxyphenyl)porphyrin, EtOH = ethanol and pyz = pyrazine. Their photophys. properties are studied by steady-state and time-resolved absorption and emission spectroscopy. Each one of the examined compds. shows weak luminescence originating from a different electronic state: porphyrin triplet 3($\pi$,$\pi$*) for RuTBP(CO)(EtOH), equatorial 3MLCT for RuTBP(pyz)2 and axial 1MLCT for [RuTBP(pyz)]n.

IT **143849-72-3**
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(steady-state and time-resolved absorption and emission spectroscopy study of photophys. properties of)

RN 143849-72-3 CAPLUS
CN Ruthenium, [4,4'-hydrazobis[pyridine]-N1][[4,4',4'',4'''-(21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[2,6-bis(1,1-dimethylethyl)phenolato]](2-)-N21,N22,N23,N24]-, (SP-5-21)- (9CI) (CA INDEX NAME)

PAGE 1-A

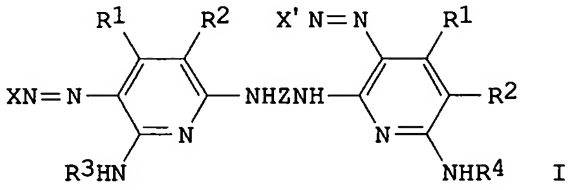



PAGE 2-A

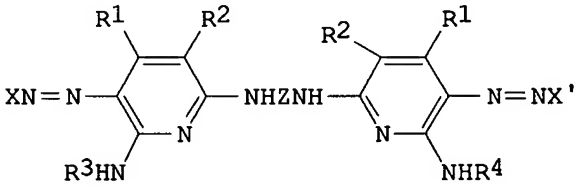
L13 ANSWER 19 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:485708 CAPLUS
DOCUMENT NUMBER: 121:85708
TITLE: Mixtures of pyridine disazo reactive dyes, their manufacture and their use
INVENTOR(S): Tzikas, Athanassios; Carisch, Claudia
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Eur. Pat. Appl., 31 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 581732 | A2 | 19940202 | EP 1993-810506 | 19930714 |
| EP 581732 | A3 | 19941012 | | |
| EP 581732 | B1 | 20000503 | | |
| R: BE, CH, DE, ES, FR, GB, IT, LI, PT | | | | |
| ES 2146221 | T3 | 20000801 | ES 1993-810506 | 19930714 |
| PT 581732 | T | 20001031 | PT 1993-810506 | 19930714 |
| JP 06179833 | A2 | 19940628 | JP 1993-181294 | 19930722 |
| JP 3576187 | B2 | 20041013 | | |

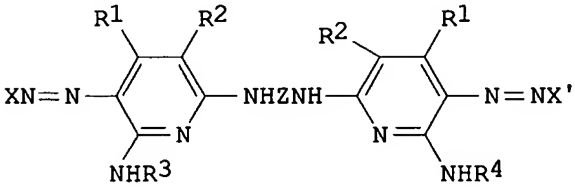
PRIORITY APPLN. INFO.: CH 1992-2350 A 19920723
OTHER SOURCE(S): MARPAT 121:85708
GI



I



II



III

AB Mixts. of I with II and(or) III (R1 = C1-4-alkyl; R2 = CN, carbamoyl, sulfomethyl; R3, R4 = H, optionally substituted alkyl; X, X' = diazo component; Z = optionally substituted alkylene) containing ≥1 reactive group are obtained for dyeing and printing of cellulosics and natural or

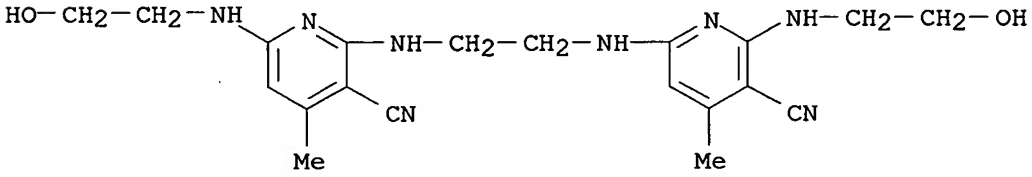
synthetic polyamides. I-III provide fast dyeings. Thus, 3-amino-4-(2-sulfatoethylsulfonyl)benzenesulfonic acid was diazotized and coupled with a mixture of 3 ethylenediaminodipyridines obtained from 2,6-dichloro-3-cyano-4-methylpyridine, ethanolamine, and ethylenediamine to give a tricomponent dye mixture, brilliant orange on cotton and wool.

IT **155952-49-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(coupling of, with diazotized amino(sulfatoethylsulfonyl)benzenesulfonic acid)

RN 155952-49-1 CAPLUS
CN 3-Pyridinecarbonitrile, 2,2'-(1,2-ethanediyldiimino)bis[6-[(2-hydroxyethyl)amino]-4-methyl-, mixt. with 2-[[2-[[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2-pyridinyl]amino]ethyl]amino]-6-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinecarbonitrile and 6,6'-(1,2-ethanediyldiimino)bis[2-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinecarbonitrile] (9CI) (CA INDEX NAME)

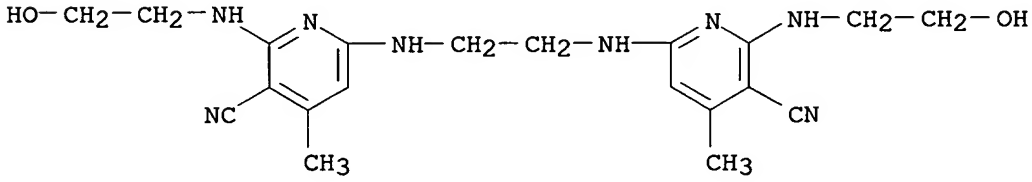
CM 1

CRN 155952-48-0
CMF C20 H26 N8 O2



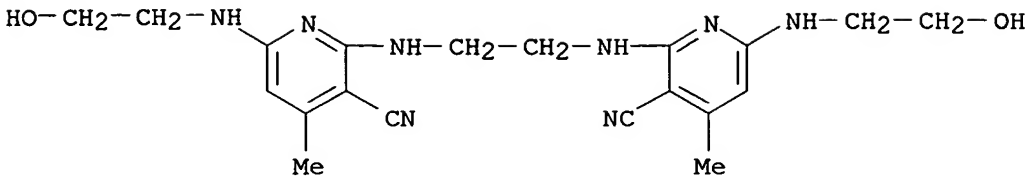
CM 2

CRN 145520-90-7
CMF C20 H26 N8 O2



CM 3

CRN 88183-48-6
CMF C20 H26 N8 O2



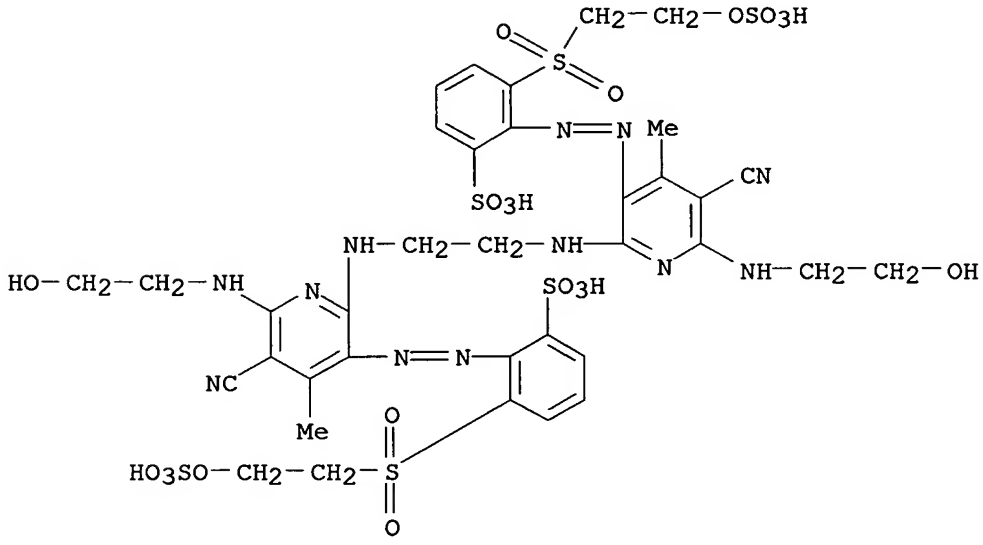
IT **155952-35-5P 155952-39-9P 155952-43-5P 155952-47-9P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of, as reactive dye for cotton and wool)

RN 155952-35-5 CAPLUS

CN Benzenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]]bis[3-[[2-(sulfooxy)ethyl]sulfonyl]-, mixt. with 3-[[5-cyano-6-[[2-[[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-3-[[5-sulfo-2-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]azo]-2-pyridinyl]amino]ethyl]amino]-2-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinyl]azo]-4-[[2-(sulfooxy)ethyl]sulfonyl]benzenesulfonic acid and 3,3'-[1,2-ethanediylbis[imino[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[4-[[2-(sulfooxy)ethyl]sulfonyl]benzenesulfonic acid] (9CI) (CA INDEX NAME)

CM 1

CRN 155952-34-4
CMF C36 H42 N12 O20 S6



CM 2

CRN 154196-46-0
CMF C36 H42 N12 O20 S6

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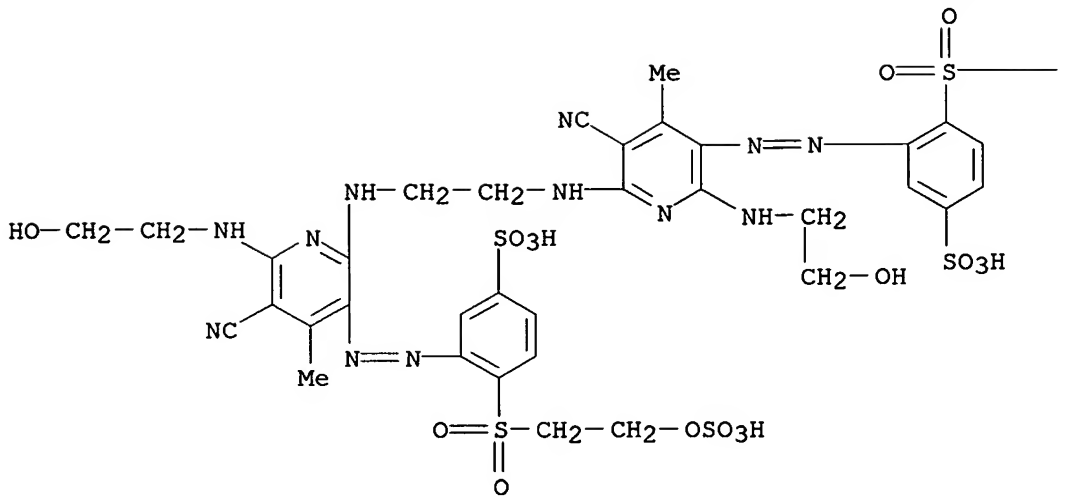


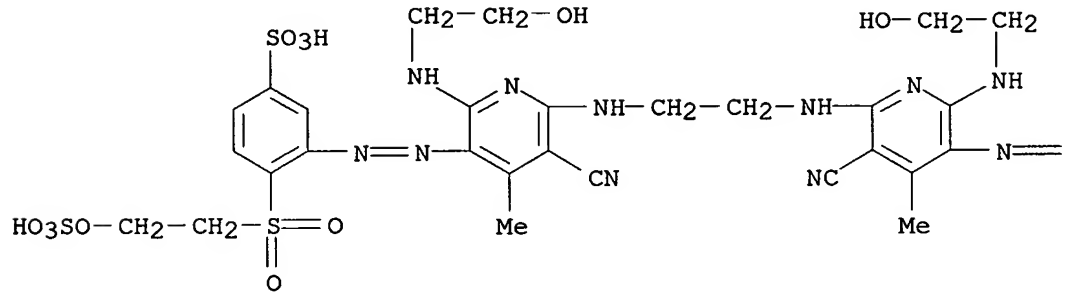
PAGE 1-B

—$CH_2$—$CH_2$—$OSO_3H$

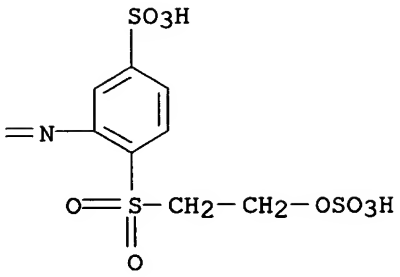
CM 3

CRN 154196-45-9
CMF C36 H42 N12 O20 S6

PAGE 1-A



PAGE 1-B

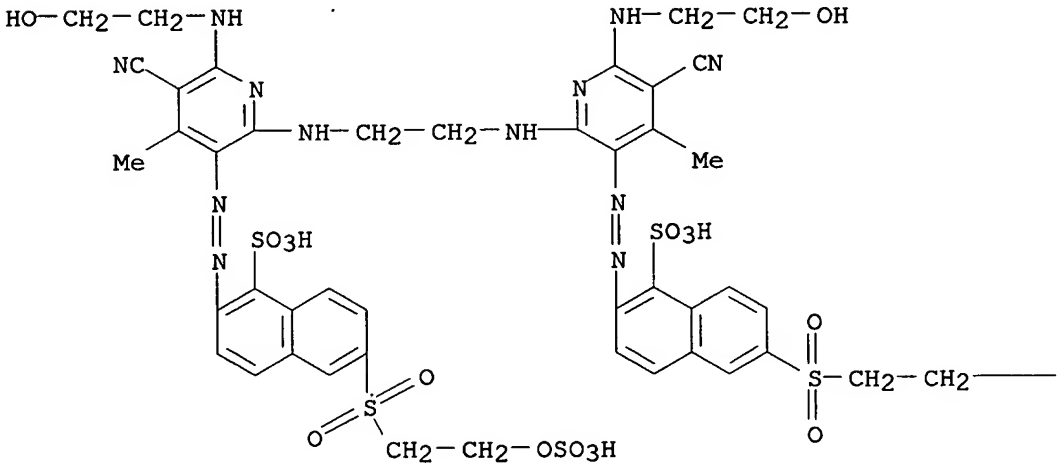


RN 155952-39-9 CAPLUS
CN 1-Naphthalenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[6-[[2-(sulfooxy)ethyl]sulfonyl]-, mixt. with 2-[[5-cyano-2-[[2-[[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-5-[[1-sulfo-6-[[2-(sulfooxy)ethyl]sulfonyl]-2-naphthalenyl]azo]-2-pyridinyl]amino]ethyl]amino]-6-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinyl]azo]-6-[[2-(sulfooxy)ethyl]sulfonyl]-1-naphthalenesulfonic acid and 2,2'-[1,2-ethanediylbis[imino[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]]bis[6-[[2-(sulfooxy)ethyl]sulfonyl]-1-naphthalenesulfonic acid] (9CI) (CA INDEX NAME)

CM 1

CRN 155952-38-8
CMF C44 H46 N12 O20 S6

PAGE 1-A



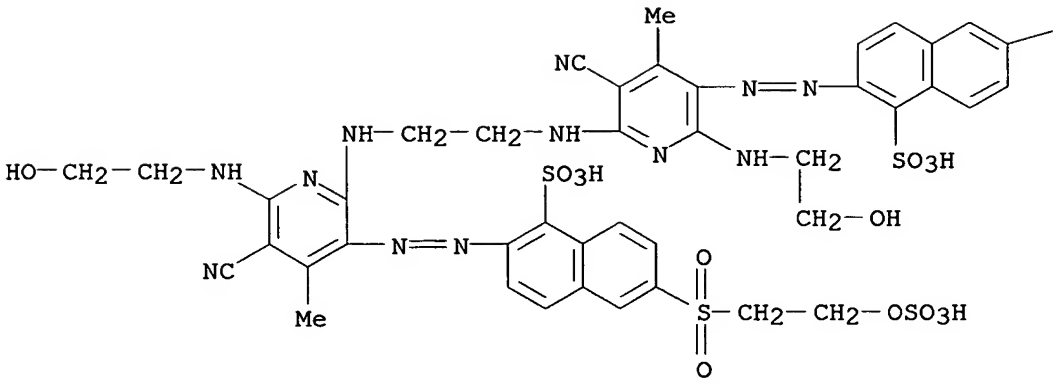
PAGE 1-B

—$OSO_3H$

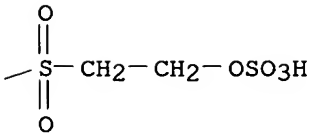
CM 2

CRN 155952-37-7
CMF C44 H46 N12 O20 S6

PAGE 1-A



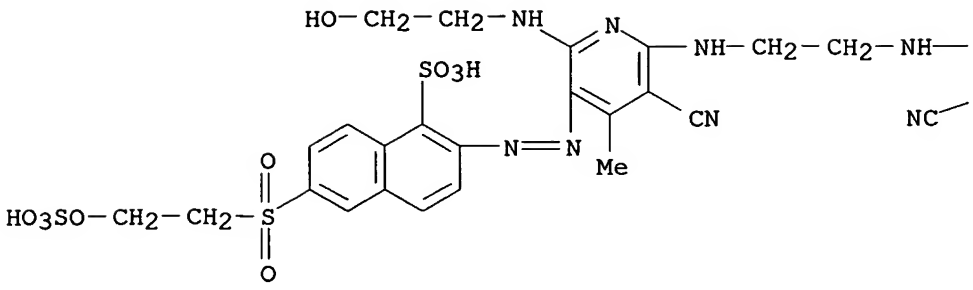
PAGE 1-B



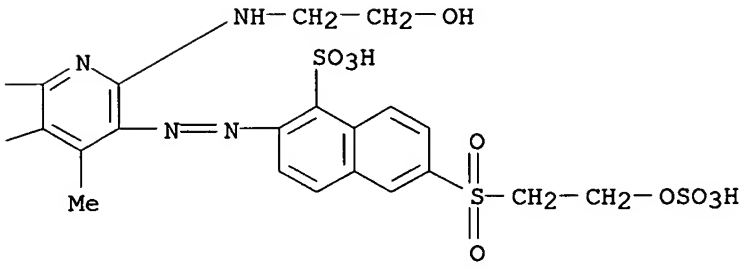
CM 3

CRN 155952-36-6
CMF C44 H46 N12 O20 S6

PAGE 1-A



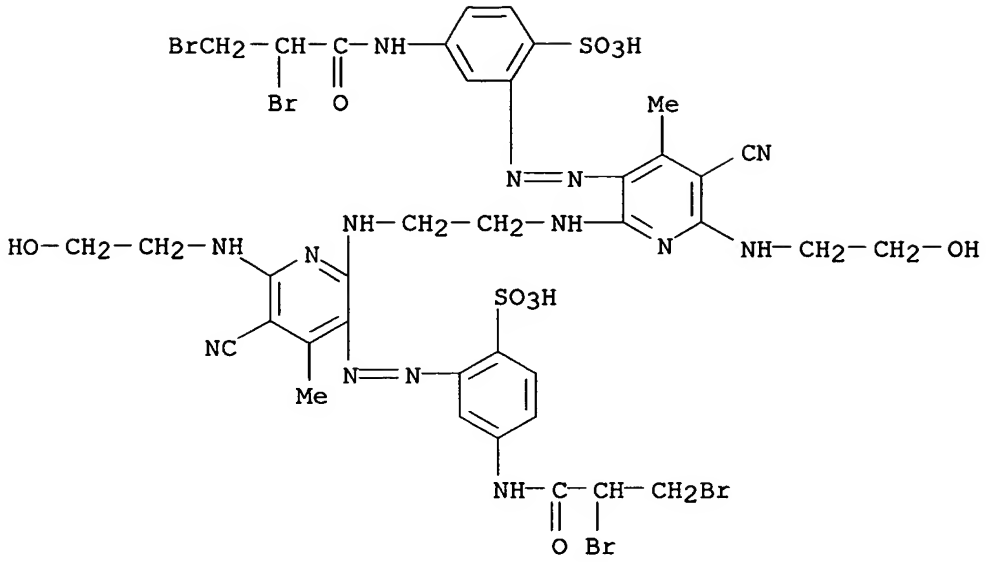
PAGE 1-B



RN 155952-43-5 CAPLUS
CN Benzenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[4-[(2,3-dibromo-1-oxopropyl)amino]-, mixt. with 2-[[5-cyano-2-[[2-[[3-cyano-5-[[5-[(2,3-dibromo-1-oxopropyl)amino]-2-sulfophenyl]azo]-6-[(2-hydroxyethyl)amino]-4-methyl-2-pyridinyl]amino]ethyl]amino]-6-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinyl]azo]-4-[(2,3-dibromo-1-oxopropyl)amino]benzenesulfonic acid and 2,2'-[1,2-ethanediylbis[imino[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]]bis[4-[(2,3-dibromo-1-oxopropyl)amino]benzenesulfonic acid] (9CI) (CA INDEX NAME)

CM 1

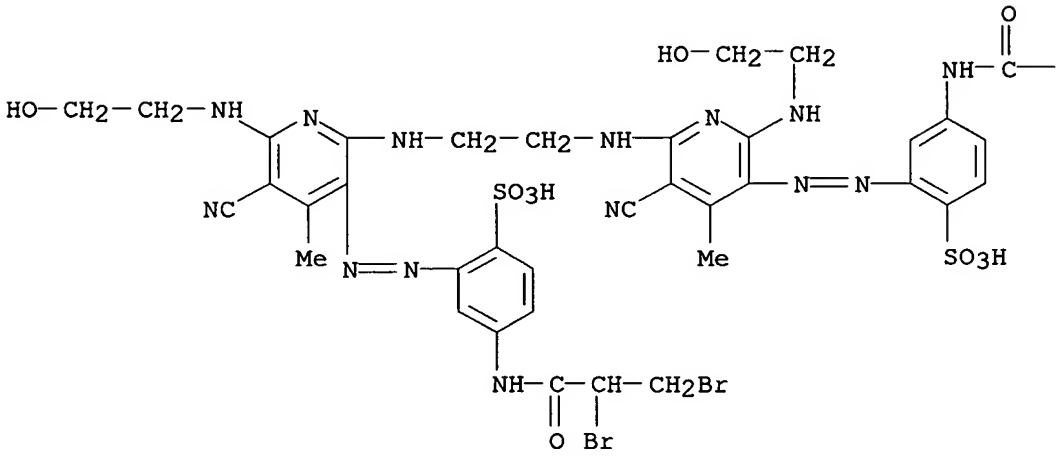
CRN 155952-42-4
CMF C38 H40 Br4 N14 O10 S2



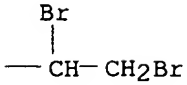
CM 2

CRN 155952-41-3
CMF C38 H40 Br4 N14 O10 S2

PAGE 1-A



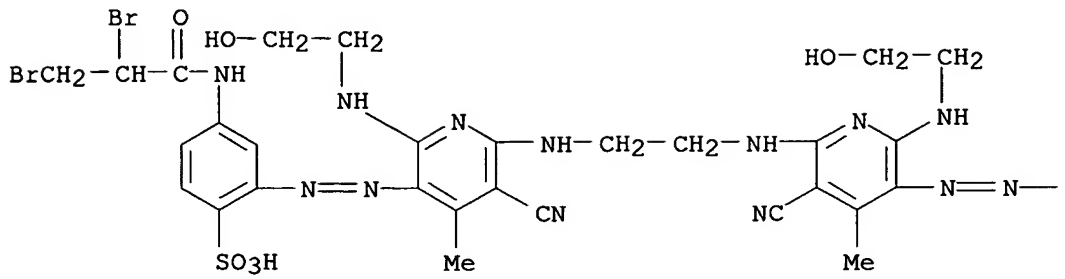
PAGE 1-B



CM 3

CRN 155952-40-2
CMF C38 H40 Br4 N14 O10 S2

PAGE 1-A



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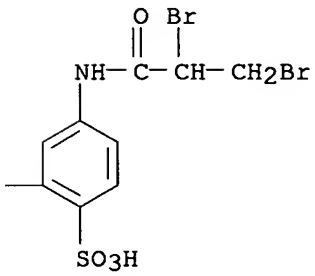
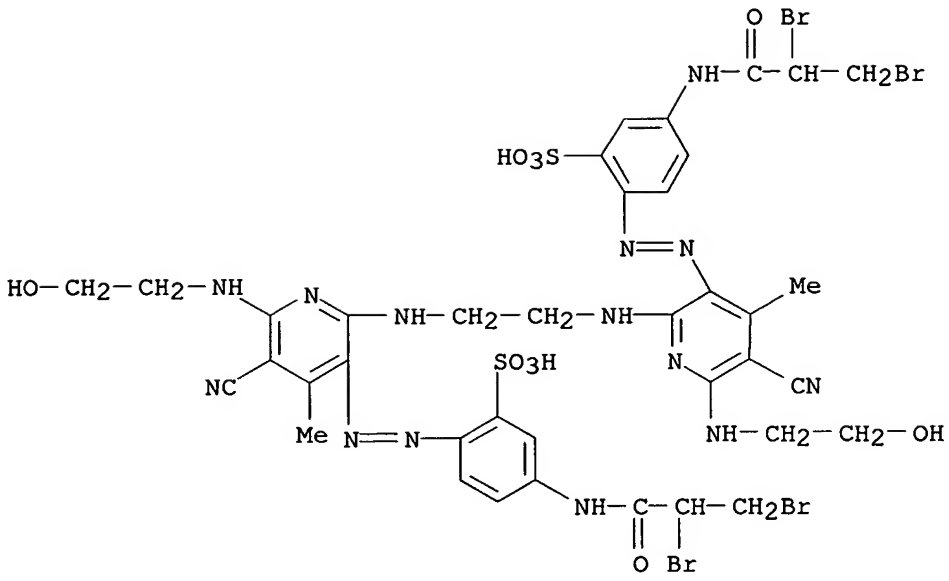


RN 155952-47-9 CAPLUS
CN Benzenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[5-[(2,3-dibromo-1-oxopropyl)amino]-, mixt. with 2-[[5-cyano-2-[[2-[[3-cyano-5-[[4-[(2,3-dibromo-1-oxopropyl)amino]-2-sulfophenyl]azo]-6-[(2-hydroxyethyl)amino]-4-methyl-2-pyridinyl]amino]ethyl]amino]-6-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinyl]azo]-5-[(2,3-dibromo-1-oxopropyl)amino]benzenesulfonic acid and 2,2'-[1,2-ethanediylbis[imino[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]]bis[5-[(2,3-dibromo-1-oxopropyl)amino]benzenesulfonic acid] (9CI) (CA INDEX NAME)

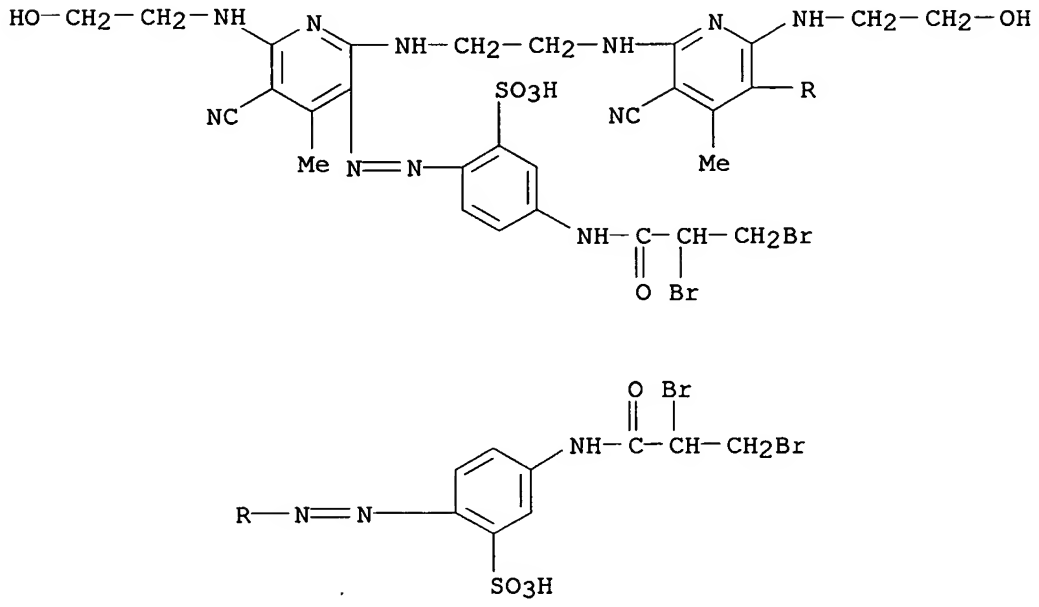
CM 1

CRN 155952-46-8
CMF C38 H40 Br4 N14 O10 S2



CM 2

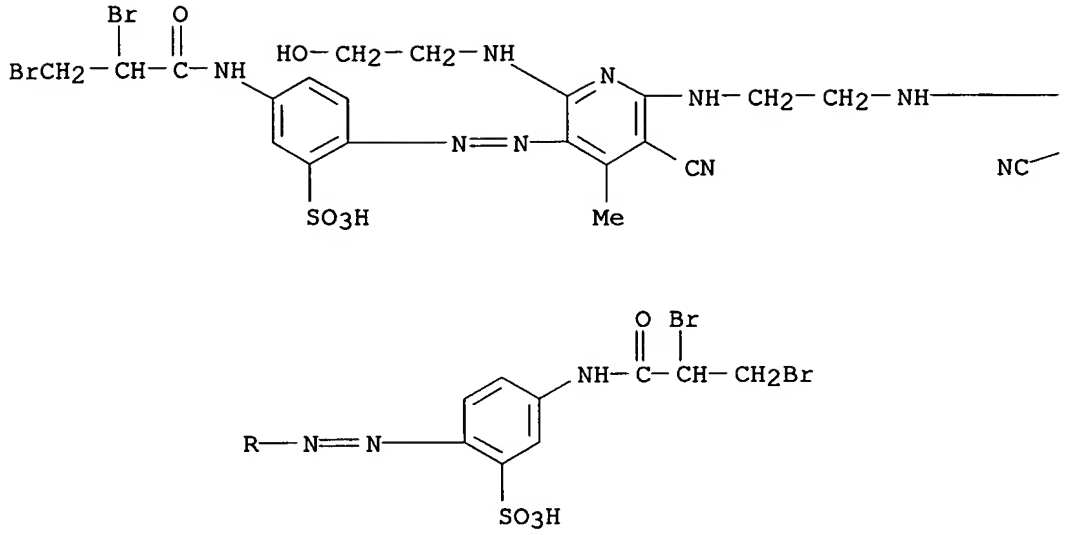
CRN 155952-45-7
CMF C38 H40 Br4 N14 O10 S2



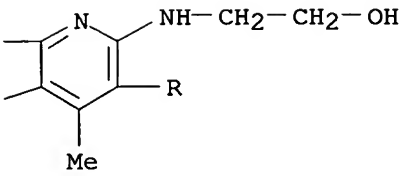
CM 3

CRN 155952-44-6
CMF C38 H40 Br4 N14 O10 S2

PAGE 1-A



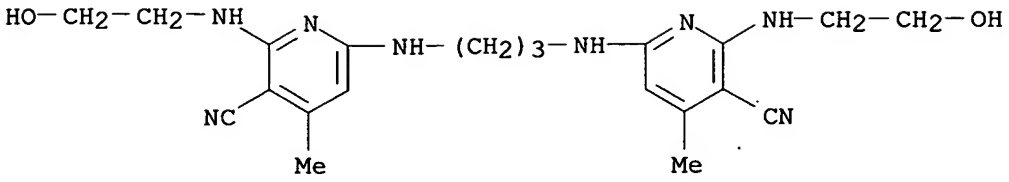
PAGE 1-B



IT **155952-50-4P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of, for coupling with diazotized aniline derivs.)
RN 155952-50-4 CAPLUS
CN 3-Pyridinecarbonitrile, 2,2'-(1,3-propanediyldiimino)bis[6-[(2-hydroxyethyl)amino]-4-methyl-, mixt. with 2-[[3-[[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2-pyridinyl]amino]propyl]amino]-6-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinecarbonitrile and 6,6'-(1,3-propanediyldiimino)bis[2-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinecarbonitrile] (9CI) (CA INDEX NAME)

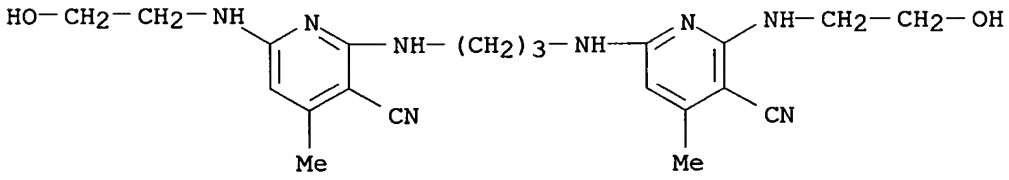
CM 1

CRN 154196-49-3
CMF C21 H28 N8 O2



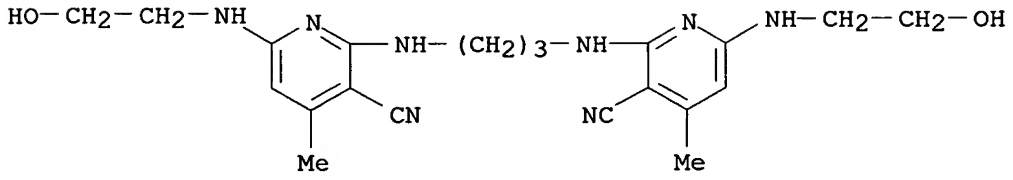
CM 2

CRN 154196-48-2
CMF C21 H28 N8 O2



CM 3

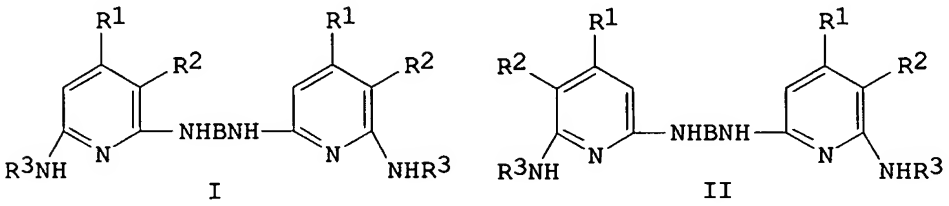
CRN 154196-42-6
CMF C21 H28 N8 O2



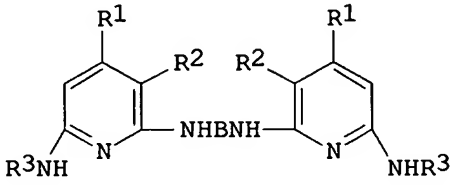
L13 ANSWER 20 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:247369 CAPLUS
DOCUMENT NUMBER: 120:247369
TITLE: Mixtures of aminopyridine compound isomers, their preparation, and their use as dye intermediates
INVENTOR(S): Herzig, Paul; Andreoli, Anton
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Eur. Pat. Appl., 18 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 580554 | A1 | 19940126 | EP 1993-810507 | 19930714 |
| R: BE, CH, DE, ES, FR, GB, IT, LI, PT | | | | |
| JP 06157460 | A2 | 19940603 | JP 1993-182625 | 19930723 |
| PRIORITY APPLN. INFO.: | | | CH 1992-2351 A | 19920723 |

OTHER SOURCE(S): MARPAT 120:247369
GI




I II




III

AB The bis(aminopyridines) I-III [B = (un)substituted C2-12 alkylene; R1 = C1-4 alkyl; R2 = CN, CONH2, sulfomethyl; R3 = H, (un)substituted C1-12 alkyl], useful as coupling components in the manufacture of azo dyes, are prepared by the condensation of pyridines (substituted in the 2- and 6-positions with leaving groups) with R3NH2 and H2NBNH2. Thus, 2,6-dichloro-3-cyano-4-methylpyridine was condensed with ethanolamine and the 2 intermediate isomers condensed with 1,3-diaminopropane, producing product isomer mixture I-III (B = CH2CH2CH2, R1 = Me, R2 = CN, R3 = CH2CH2OH) in 35%, 5%, and 60% ratio, resp.

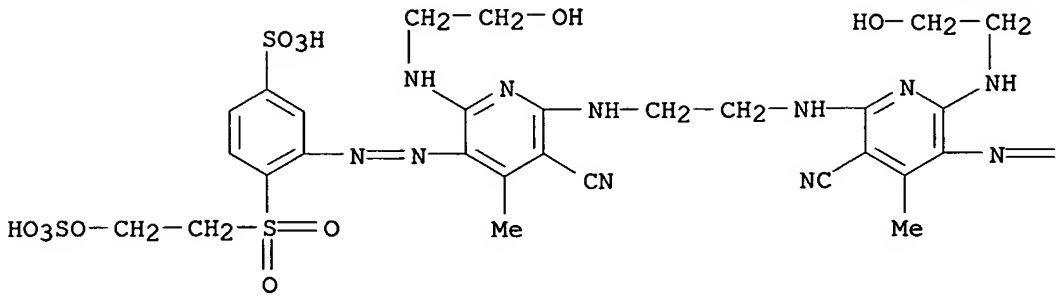
IT **154196-45-9P 154196-46-0P 154196-47-1P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of, as component of orange dye for cotton and wool)

RN 154196-45-9 CAPLUS

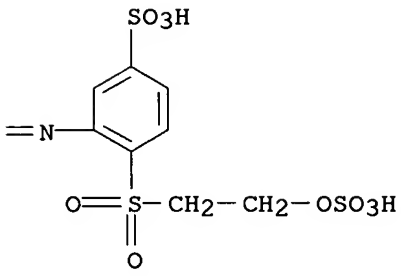
CN Benzenesulfonic acid, 3,3'-[1,2-ethanediylbis[imino[3-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[4-[[2-

(sulfooxy)ethyl]sulfonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

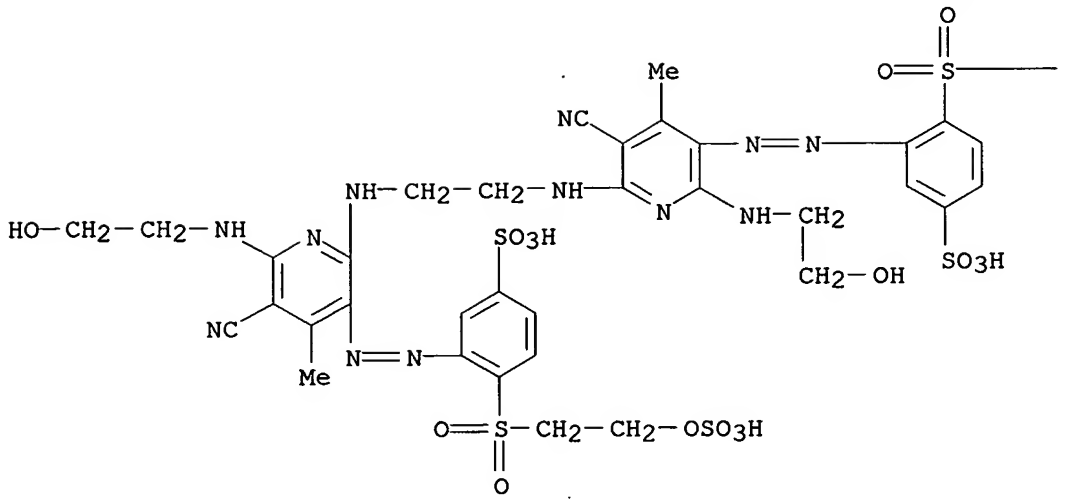


PAGE 1-B



RN 154196-46-0 CAPLUS
CN Benzenesulfonic acid, 3-[[5-cyano-6-[[2-[[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-3-[[5-sulfo-2-[[2-(sulfooxy)ethyl]sulfonyl]phenyl]azo]-2-pyridinyl]amino]ethyl]amino]-2-[(2-hydroxyethyl)amino]-4-methyl-3-pyridinyl]azo]-4-[[2-(sulfooxy)ethyl]sulfonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

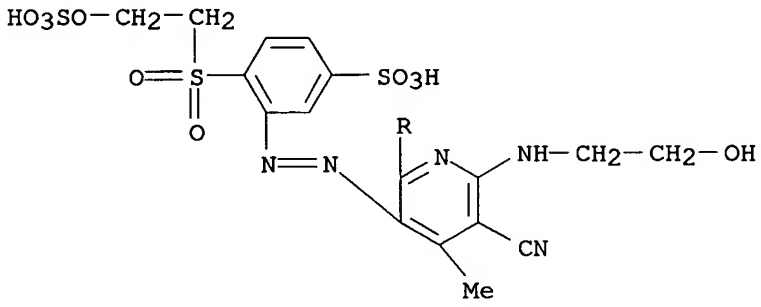


PAGE 1-B

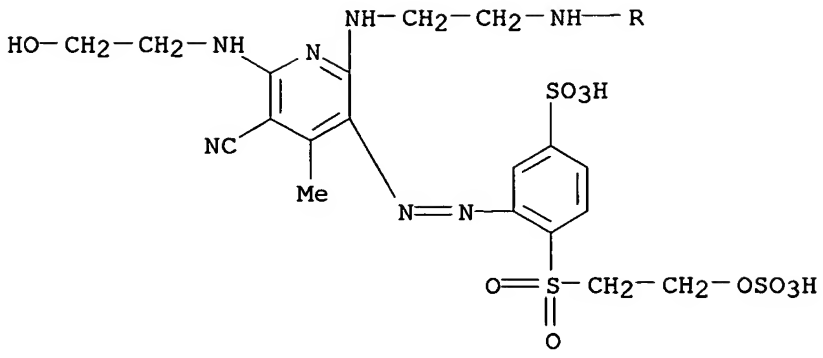
— $CH_2$— $CH_2$— $OSO_3H$

RN 154196-47-1 CAPLUS
CN Benzenesulfonic acid, 3,3'-[1,2-ethanediylbis[imino[5-cyano-6-[(2-hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]]bis[4-[[2-(sulfooxy)ethyl]sulfonyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



L13 ANSWER 21 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:120440 CAPLUS
DOCUMENT NUMBER: 120:120440
TITLE: Polyurea nonlinear optical device
INVENTOR(S): Hari, Shingu Naruwa; Tsunoda, Atsushi
PATENT ASSIGNEE(S): Hitachi Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

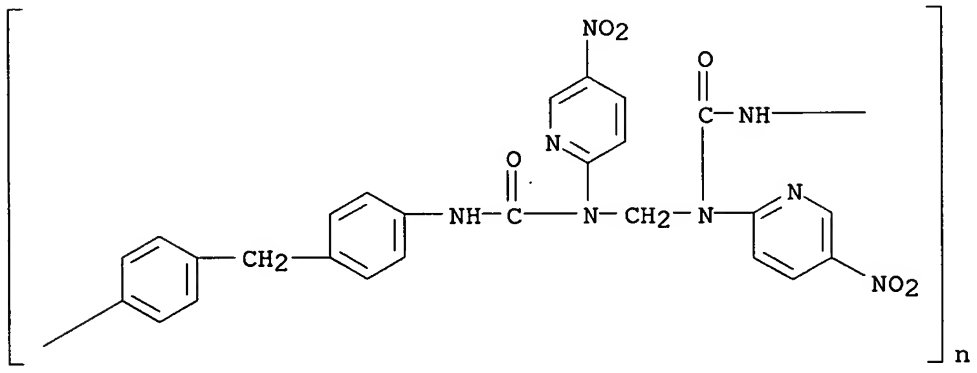
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 05196977 | A2 | 19930806 | JP 1992-243025 | 19920911 |
| JP 2789957 | B2 | 19980827 | | |

PRIORITY APPLN. INFO.: JP 1991-241687 A1 19910920

AB The title device comprises a high+-receiving surface, a light-emitting surface, and a polymer nonlinear optical medium consisting of a structural repeating unit represented by N(X)AN(X)CON(Y)13 N(Y)CO [A, B = CH2 chains, (substituted) C6H6, biphenyl, terphenyl, stilbene, azobenzene, benzylidene, diphenylmethane, di-Ph ether, di-Ph thioether, acridine, fluorene, indole, heterocycles; X, Y = H, (substituted) C6H6, biphenyl, pyridine, azobenzene, benxylidene].

IT **152801-34-8 152801-36-0**
RL: USES (Uses)
(nonlinear optical device from)

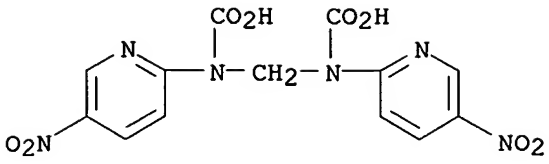
RN 152801-34-8 CAPLUS
CN Poly[iminocarbonyl[(5-nitro-2-pyridinyl)imino]methylene[(5-nitro-2-pyridinyl)imino]carbonylimino-1,4-phenylenemethylene-1,4-phenylene] (9CI) (CA INDEX NAME)




RN 152801-36-0 CAPLUS
CN Carbamic acid, methylenebis[(5-nitro-2-pyridinyl)-, polymer with 4,4'-methylenebis[benzenamine] (9CI) (CA INDEX NAME)

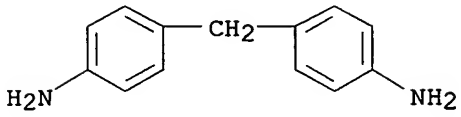
CM 1

CRN 152801-35-9
CMF C13 H10 N6 O8



CM 2

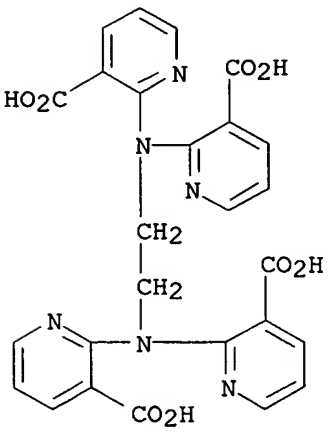
CRN 101-77-9
CMF C13 H14 N2



L13 ANSWER 22 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:637899 CAPLUS
DOCUMENT NUMBER: 119:237899
TITLE: Photographic processing composition containing diamino polycarboxylic chelating agent to prevent sludge formation and the method for processing
INVENTOR(S): Okada, Hisashi; Inaba, Tadashi
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 05158195 | A2 | 19930625 | JP 1991-348429 | 19911205 |
| JP 2824709 | B2 | 19981118 | | |

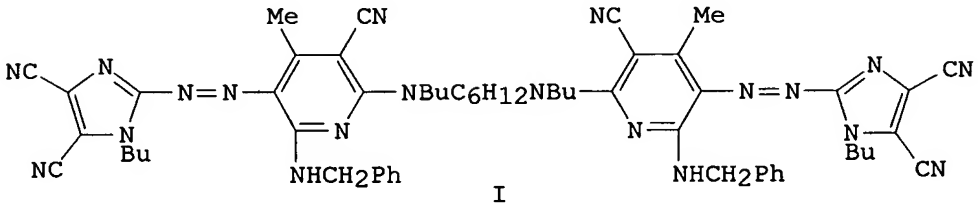
PRIORITY APPLN. INFO.: JP 1991-348429 19911205
GI For diagram(s), see printed CA Issue.
AB The claimed composition contains ≥1 compound I (A = heterocyclic ring; R = H, substituent; n = 1-10; R1-3 = H, aliphatic aromatic or heterocyclic group; at least one of the R1-3 is substituted by OH, carboxy, sulfo, phosphono, sulfamido, carbonamido or carbamoyl group; Z = bivalent linkage comprising an alkylene or arylene group). Photog. processing using the composition is also claimed. It prevents the processing solution from forming sludges induced by contamination of metal ions.
IT **151028-77-2**
RL: USES (Uses)
(water softener, for photog. processing solns.)
RN 151028-77-2 CAPLUS
CN 3-Pyridinecarboxylic acid, 2,2',2'',2'''-(1,2-ethanediyldinitrilo)tetrakis- (9CI) (CA INDEX NAME)



L13 ANSWER 23 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:528450 CAPLUS
DOCUMENT NUMBER: 119:128450
TITLE: Thermal-transfer sheets providing image with storage stability
INVENTOR(S): Kafuku, Masaaki; Eguchi, Hiroshi; Nakamura, Masayuki
PATENT ASSIGNEE(S): Dai Nippon Printing Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 05096869 | A2 | 19930420 | JP 1991-290348 | 19911011 |
| PRIORITY APPLN. INFO.: | | | JP 1991-290348 | 19911011 |

GI

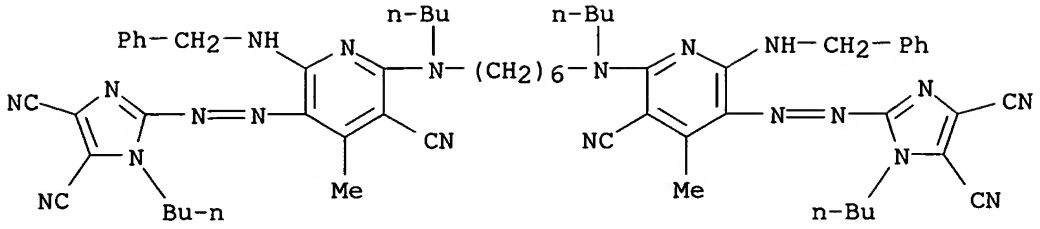



I

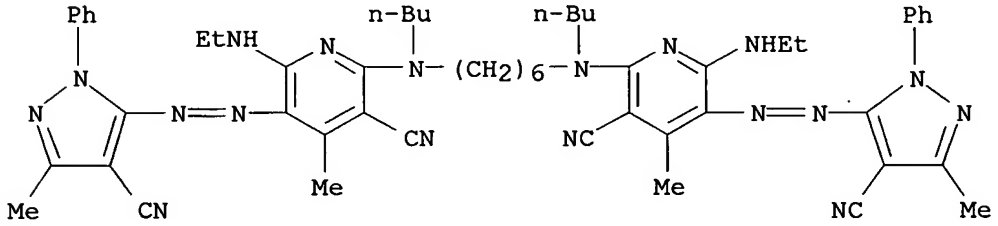
AB The title sheets comprise a support with a coating of a dye-carrying layer containing a dye having a chromophore from ≥2 azo bonds which are linked by a nonconjugated linking group and containing ≥1 pyridine ring. The sheets provide clear, high d. images with excellent storage stability. Thus, a PET film with a back coating layer was coated with a composition containing I and poly(vinyl butyral) resin to give a thermal-transfer sheet.

IT **149558-34-9 149558-39-4 149558-43-0**
**149558-44-1 149558-47-4 149558-48-5**
**149558-50-9 149558-51-0 149558-52-1**
**149558-55-4 149558-56-5 149558-57-6**
**149558-59-8**
RL: USES (Uses)
(dye, thermal-transfer recording material using)

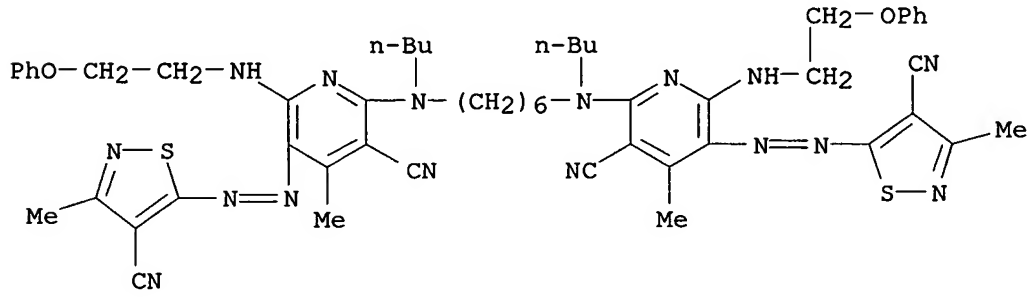
RN 149558-34-9 CAPLUS
CN 1H-Imidazole-4,5-dicarbonitrile, 2,2'-[1,6-hexanediylbis[(butylimino)[3-cyano-4-methyl-6-[(phenylmethyl)amino]-2,5-pyridinediyl]azo]]bis[1-butyl-(9CI) (CA INDEX NAME)



RN 149558-39-4 CAPLUS
CN 3-Pyridinecarbonitrile, 2,2'-[1,6-hexanediylbis(butylimino)]bis[5-[(4-cyano-3-methyl-1-phenyl-1H-pyrazol-5-yl)azo]-6-(ethylamino)-4-methyl- (9CI) (CA INDEX NAME)

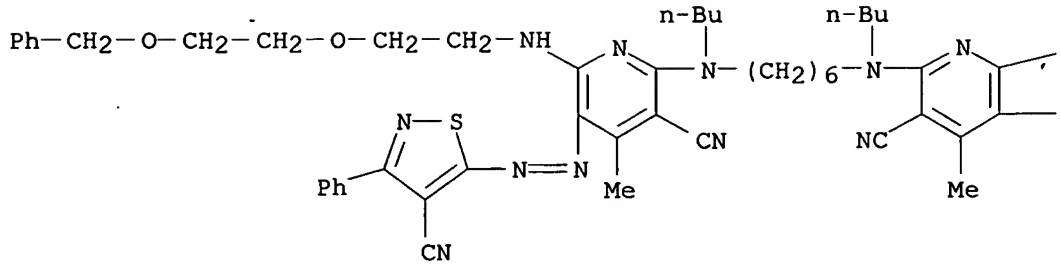


RN 149558-43-0 CAPLUS
CN 3-Pyridinecarbonitrile, 2,2'-[1,6-hexanediylbis(butylimino)]bis[5-[(4-cyano-3-methyl-5-isothiazolyl)azo]-4-methyl-6-[(2-phenoxyethyl)amino]- (9CI) (CA INDEX NAME)

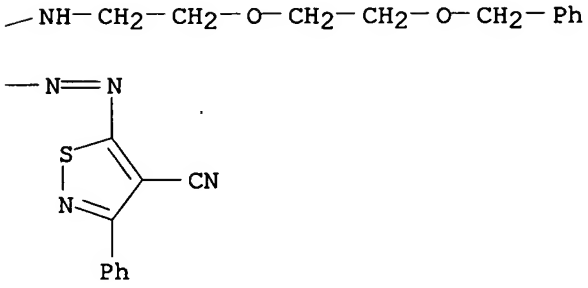


RN 149558-44-1 CAPLUS
CN 3-Pyridinecarbonitrile, 2,2'-[1,6-hexanediylbis(butylimino)]bis[5-[(4-cyano-3-phenyl-5-isothiazolyl)azo]-4-methyl-6-[[2-[2-(phenylmethoxy)ethoxy]ethyl]amino]- (9CI) (CA INDEX NAME)

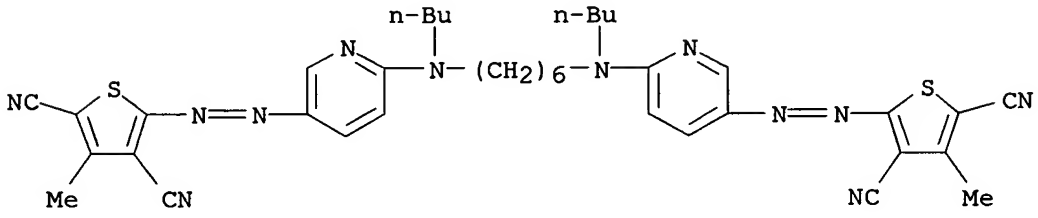
PAGE 1-A



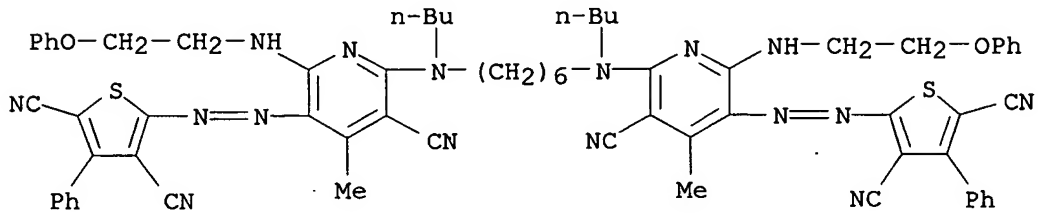
PAGE 1-B



RN 149558-47-4 CAPLUS
CN 2,4-Thiophenedicarbonitrile, 5,5'-[1,6-hexanediylbis[(butylimino)-2,5-pyridinediylazo]]bis[3-methyl- (9CI) (CA INDEX NAME)

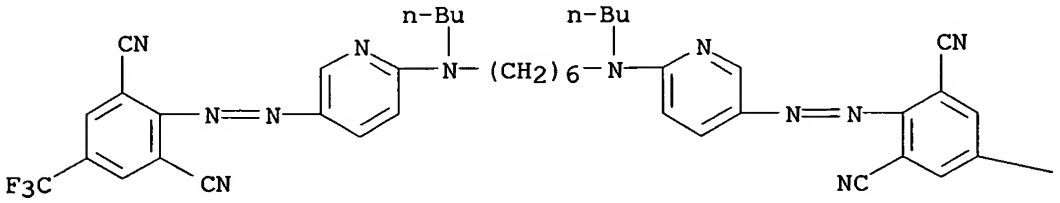


RN 149558-48-5 CAPLUS
CN 2,4-Thiophenedicarbonitrile, 5,5'-[1,6-hexanediylbis[(butylimino)[3-cyano-4-methyl-6-[(2-phenoxyethyl)amino]-2,5-pyridinediyl]azo]]bis[3-phenyl- (9CI) (CA INDEX NAME)



RN 149558-50-9 CAPLUS
CN 1,3-Benzenedicarbonitrile, 2,2'-[1,6-hexanediylbis[(butylimino)-2,5-pyridinediylazo]]bis[5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

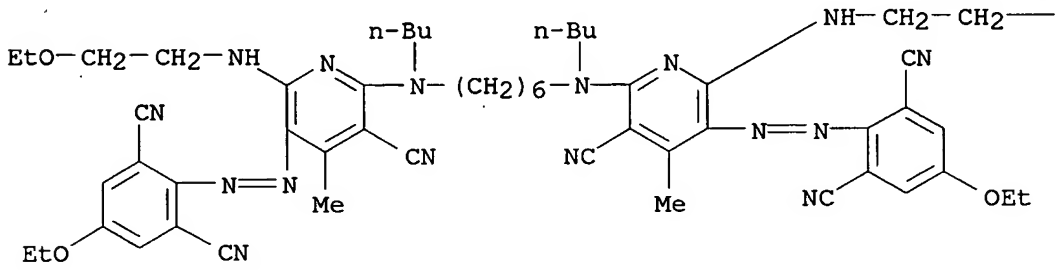


PAGE 1-B

—$CF_3$

RN 149558-51-0 CAPLUS
CN 1,3-Benzenedicarbonitrile, 2,2'-[1,6-hexanediylbis[(butylimino)[3-cyano-6-[(2-ethoxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[5-ethoxy- (9CI) (CA INDEX NAME)

PAGE 1-A

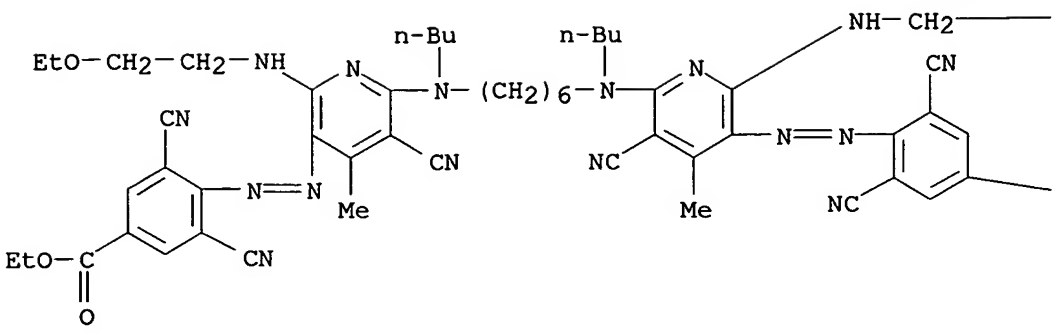


PAGE 1-B

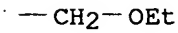
—OEt

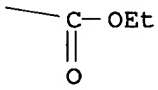
RN 149558-52-1 CAPLUS
CN Benzoic acid, 4,4'-[1,6-hexanediylbis[(butylimino)[3-cyano-6-[(2-ethoxyethyl)amino]-4-methyl-2,5-pyridinediyl]azo]]bis[3,5-dicyano-, diethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



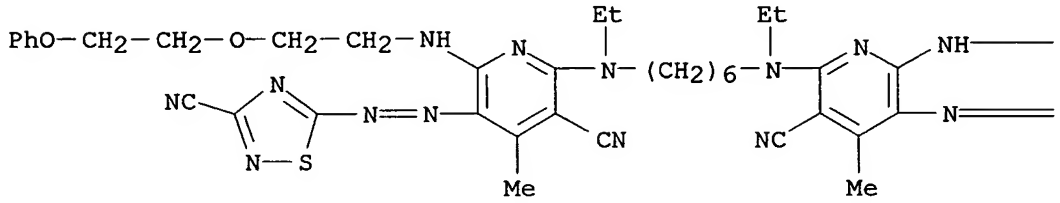
PAGE 1-B



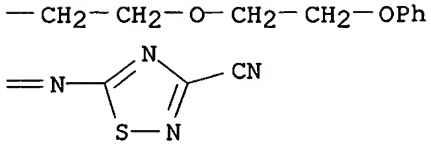


RN 149558-55-4 CAPLUS
CN 3-Pyridinecarbonitrile, 2,2'-[1,6-hexanediylbis(ethylimino)]bis[5-[(3-cyano-1,2,4-thiadiazol-5-yl)azo]-4-methyl-6-[[2-(2-phenoxyethoxy)ethyl]amino]- (9CI) (CA INDEX NAME)

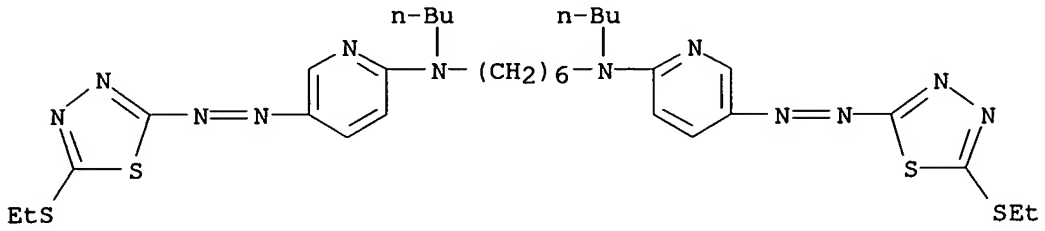
PAGE 1-A



PAGE 1-B

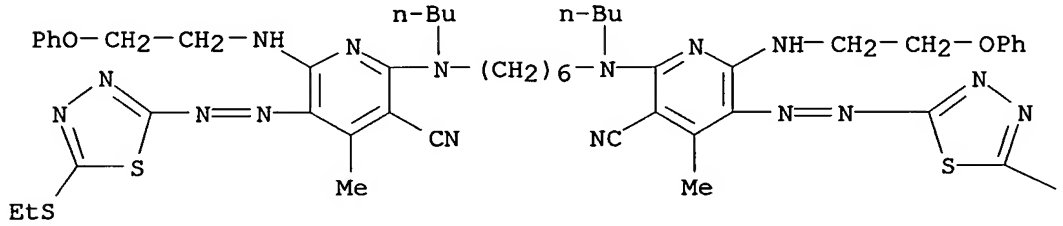


RN 149558-56-5 CAPLUS
CN 1,6-Hexanediamine, N,N'-dibutyl-N,N'-bis[5-[[5-(ethylthio)-1,3,4-thiadiazol-2-yl]azo]-2-pyridinyl]- (9CI) (CA INDEX NAME)



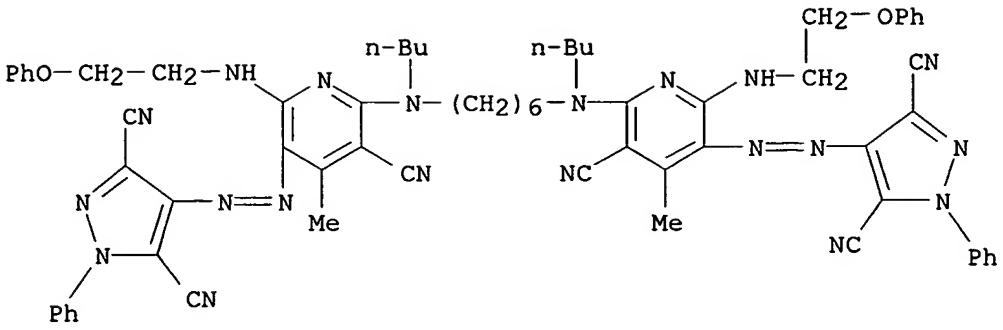
RN 149558-57-6 CAPLUS
CN 3-Pyridinecarbonitrile, 2,2'-[1,6-hexanediylbis(butylimino)]bis[5-[[5-(ethylthio)-1,3,4-thiadiazol-2-yl]azo]-4-methyl-6-[(2-phenoxyethyl)amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

RN 149558-59-8 CAPLUS
CN 1H-Pyrazole-3,5-dicarbonitrile, 4,4'-[1,6-hexanediylbis[(butylimino)[3-cyano-4-methyl-6-[(2-phenoxyethyl)amino]-2,5-pyridinediyl]azo]]bis[1-phenyl- (9CI) (CA INDEX NAME)



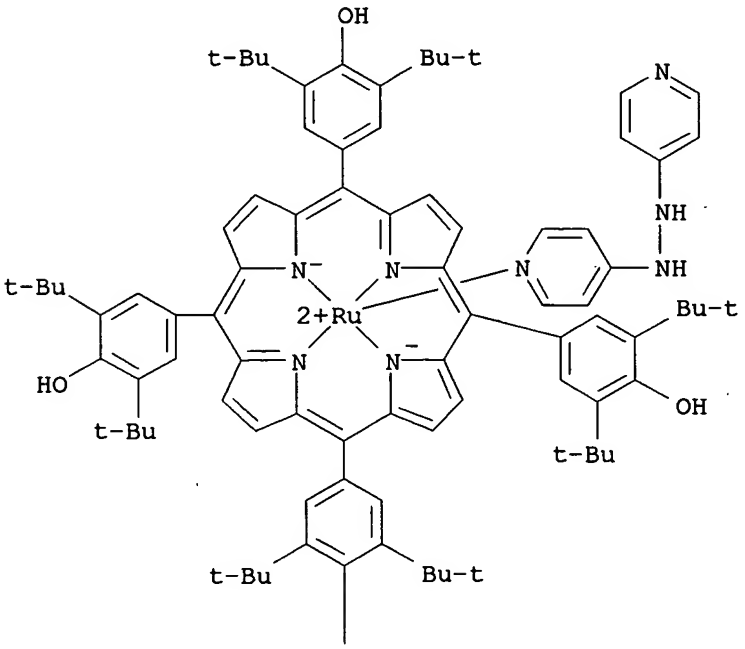
L13 ANSWER 24 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:204045 CAPLUS
DOCUMENT NUMBER: 118:204045
TITLE: Control of intramolecular electron transfer by protonation: oligomers of ruthenium porphyrins bridged by 4,4'-azopyridine
AUTHOR(S): Marvaud, Valerie; Launay, Jean Pierre
CORPORATE SOURCE: LOE, CEMES, Toulouse, 31055, Fr.
SOURCE: Inorganic Chemistry (1993), 32(8), 1376-82
CODEN: INOCAJ; ISSN: 0020-1669
DOCUMENT TYPE: Journal
LANGUAGE: English

AB To exploit the control of an intramol. electron transfer by a protonation process, shish kebab oligomers were prepared by 1st preparing [Ru(TBP)CO(EtOH)] (H2TBP = tetrakis(3,5-di-tert-butyl-4-hydroxyphenyl)porphyrin. This complex was photochem. decarbonylated in the presence of bridging ligands (4,4'-azopyridine or pyrazine). Oligomers are obtained, which can be oxidized by I, giving rise to intervalence transitions between Ru(II) and Ru(III) in the near-IR. This provides a convenient way to monitor electron transfer along the oligomer chain. In the case of 4,4'-azopyridine, a pH-induced redox reaction is observed Starting from a homovalent Ru(II) chain, this gives the possibility to switch on or off the intervalence transition by a protonation/deprotonation reaction.

IT **143849-72-3P 147157-46-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 143849-72-3 CAPLUS
CN Ruthenium, [4,4'-hydrazobis[pyridine]-N1][[4,4',4'',4'''-(21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[2,6-bis(1,1-dimethylethyl)phenolato]](2-)-N21,N22,N23,N24]-, (SP-5-21)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

OH

RN 147157-46-8 CAPLUS
CN Ruthenium, [μ-[4,4'-azobis[pyridine]-N1:N1']][4,4'-hydrazobis[pyridine]-N1]bis[[4,4',4'',4'''-(21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[2,6-bis(1,1-dimethylethyl)phenolato]](2-)-N21,N22,N23,N24]di- (9CI) (CA INDEX NAME)

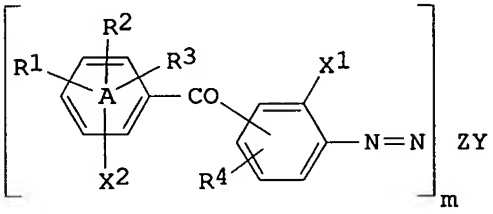
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L13 ANSWER 25 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:126484 CAPLUS
DOCUMENT NUMBER: 118:126484
TITLE: Benzophenone-derived azo dyes and their use
INVENTOR(S): Lamm, Gunther; Reichelt, Helmut; Schaffer, Ortwin
PATENT ASSIGNEE(S): BASF A.-G., Germany
SOURCE: Ger. Offen., 39 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| DE 4105257 | A1 | 19920827 | DE 1991-4105257 | 19910220 |
| WO 9214791 | A1 | 19920903 | WO 1992-EP281 | 19920210 |
| W: US | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE | | | | |
| EP 572450 | A1 | 19931208 | EP 1992-904351 | 19920210 |
| EP 572450 | B1 | 19941026 | | |
| R: CH, DE, ES, FR, GB, IT, LI | | | | |
| ES 2063580 | T3 | 19950101 | ES 1992-904351 | 19920210 |
| JP 06041448 | A2 | 19940215 | JP 1992-57896 | 19920316 |
| US 5380859 | A | 19950110 | US 1993-87792 | 19930716 |
| US 5510468 | A | 19960423 | US 1994-281035 | 19940727 |

PRIORITY APPLN. INFO.: DE 1991-4105257 A 19910220
WO 1992-EP281 W 19920210
US 1993-87792 A3 19930716

OTHER SOURCE(S): MARPAT 118:126484
GI



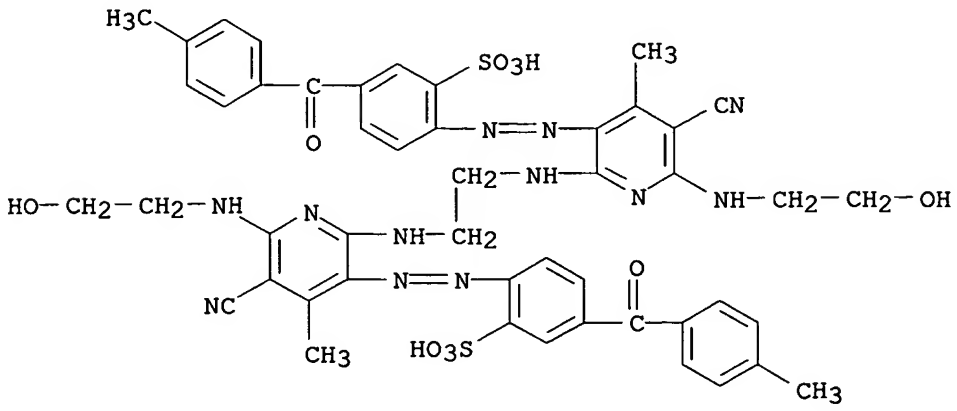

I

AB The dyes (I; X1, X2 = H, SO3H; R1-R3 = H, halogen, C1-12-alkyl, cyclohexyl, Ph, HOCH2CH2SO2, C1-4-alkoxy; R4 = H, halogen, C1-4-alkoxy; Y = H, arylazo; Z = coupling component residue; m = 1, 2; ring A may be annelated) are obtained for use on polyamide fibers, leather, and wool. Thus, 4-amino-4'-methyl-3'-benzophenonesulfonic acid was diazotized and coupled with 1-hydroxy-8-amino-3,6-naphthalenedisulfonic acid to give an azo dye, which was then coupled with diazotized 4-amino-2',5'-dimethylbenzophenone to provide a disazo dye, λmax 604 nm, which imparted navy blue shades to leather, polyamides, and wool.

IT **145520-53-2P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of, as orange dye for leather, polyamide and wool)

RN 145520-53-2 CAPLUS
CN Benzenesulfonic acid, 2,2'-[1,2-ethanediylbis[imino[5-cyano-6-[(2-

hydroxyethyl)amino]-4-methyl-2,3-pyridinediyl]azo]]bis[5-(4-methylbenzoyl)-, disodium salt (9CI) (CA INDEX NAME)

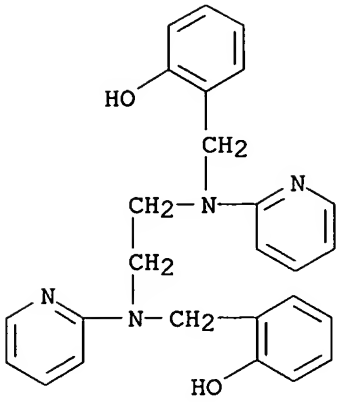


●2 Na

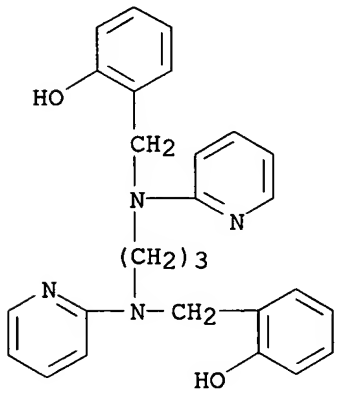
L13 ANSWER 26 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1992:663501 CAPLUS
DOCUMENT NUMBER: 117:263501
TITLE: Synthesis, crystal structure, electrochemical, and spectroelectrochemical properties of the new manganese(III) complex [MnIII(BBPEN)][PF6] [H2BBPEN = N,N'-bis(2-hydroxybenzyl)-N,N'-bis(2-methylpyridyl)ethylenediamine]
AUTHOR(S): Neves, Ademir; Erthal, Sueli M. D.; Vencato, Ivo; Ceccato, Augusto S.; Mascarenhas, Yvonne P.; Nascimento, Otaciro R.; Horner, Manfredo; Batista, Alzir A.
CORPORATE SOURCE: Dep. Quim., Univ. Fed. Santa Catarina, Florianopolis, Brazil
SOURCE: Inorganic Chemistry (1992), 31(23), 4749-55
CODEN: INOCAJ; ISSN: 0020-1669
DOCUMENT TYPE: Journal
LANGUAGE: English

AB H2L [H2L = N,N'-bis(2-hydroxybenzyl)-N,N'-bis(2-pyridylmethyl)ethylenediamine (H2BBPEN), N,N'-bis(2-hydroxybenzyl)-N,N'-bis(2-pyridylmethyl)-1,3-propanediamine (H2BBPPN)], derived from alkyldiamines containing phenolate-type and α-pyridyl pendant arms, were prepared Reaction of H2L with Mn(OAc)3 in MeOH solution gave [MnL][PF6] in high yields. The crystal structure of [Mn(BBPEN)][PF6] (1) was determined by x-ray crystallog. Crystal data: monoclinic, space group P21/n, a 11.310(2), b 21.266(3), c 11.791(4) Å, β 106.7(2)°, Z = 4, R = 0.063, Rw = 0.072. In 1, BBPEN is hexadentate with distorted octahedral MnN4O2 geometry and 2 trans pyridyl groups. The presence of 4 short Mn-O and Mn-N bonds and 2 long Mn-N bonds are consistent with Jahn-Teller effects. The magnetic moments (4.85-4.90 μB) of [MnL][PF6] correspond to the d4 configuration. Cyclic voltammograms of 1 and [Mn(BBPPN)][PF6] (2) in MeCN show 2 quasireversible 1-electron-transfer processes corresponding, resp., to Mn(IV)/Mn(III) at 0.24 and 0.61 V and Mn(III)/Mn(II) at -0.37 and -0.44 V vs. ferrocinium/ferrocene. UV-visible spectroelectrochem. was used to characterize the Mn(IV) analogs of these complexes. E° Values obtained from these spectropotentiostatic data are consistent with values determined from cyclic voltammograms. The electronic spectra of the oxidized species show 2 intense ligand-to-metal charge-transfer (LMCT) transitions at 400-800 nm, and solns. of [MnIV(BBPEN)]2+ are stable for ≥24 h under Ar. The X-band EPR spectra of [MnIV(BBPEN)]2+ obtained at 110 K shows prominent features at g1 = 5.84, g2 = 4.77, and g3 = 1.99 and is consistent with a rhombically distorted S = 3/2 spin system.

IT **144512-79-8P 144512-80-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 144512-79-8 CAPLUS
CN Phenol, 2,2'-[1,2-ethanediylbis[(2-pyridinylimino)methylene]]bis- (9CI) (CA INDEX NAME)



RN 144512-80-1 CAPLUS
CN Phenol, 2,2'-[1,3-propanediylbis[(2-pyridinylimino)methylene]]bis- (9CI) (CA INDEX NAME)



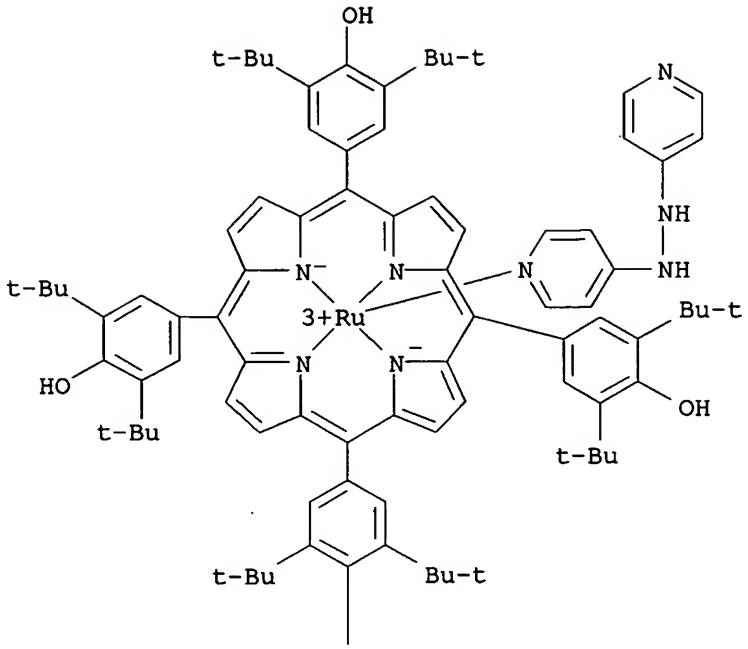
L13 ANSWER 27 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1992:583695 CAPLUS
DOCUMENT NUMBER: 117:183695
TITLE: Control of intramolecular electron transfer by protonation: dimers and polymers containing ruthenium II/III and 4,4'-azopyridine
AUTHOR(S): Launay, Jean Pierre; Marvaud, Valerie
CORPORATE SOURCE: Mol. Electron. Group, CNRS, Toulouse, 31055, Fr.
SOURCE: AIP Conference Proceedings (1992), 262(Mol. Electron.: Sci. Technol.), 118-28
CODEN: APCPCS; ISSN: 0094-243X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB To exploit control of an intramol. electron transfer by a protonation process, shishkebab polymers were prepared by 1st inserting Ru in tetrakis(3,5-di-tert-butyl-4-hydroxyphenyl)porphyrin (H2L) under a CO atmospheric
The resulting RuL(CO)(EtOH) was photochem. decarbonylated in the presence of bridging ligands (4,4'-azopyridine or pyrazine). Polymers were obtained, which could be oxidized by I2, giving rise to intervalence transitions between Ru(II) and (III) in the near IR. This provides a convenient way to monitor electron transfer along the polymer chain. In the case of 4,4'-azopyridine, the pH induced redox reaction is observed Starting from a homovalent Ru(II) chain, this gives the possibility to switch on or off the intervalence transition by a protonation/deprotonation reaction.

IT **143849-71-2DP**, reaction product with ruthenium azopyridine pyrazine porphyrinato complex
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and electronic spectrum of)

RN 143849-71-2 CAPLUS
CN Ruthenium(1+), [4,4'-hydrazobis[pyridine]-N1][[4,4',4'',4'''-(21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[2,6-bis(1,1-dimethylethyl)phenolato]](2-)-N21,N22,N23,N24]-, (SP-5-21)- (9CI) (CA INDEX NAME)

PAGE 1-A

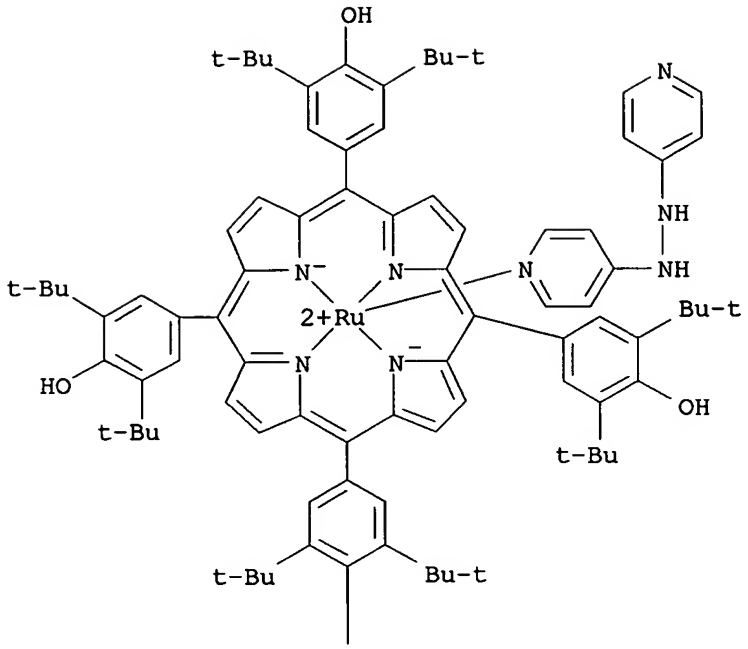



PAGE 2-A


IT **143849-69-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and intervalence transition absorptivity of)
RN 143849-69-8 CAPLUS
CN Ruthenium(1+), [μ-[4,4'-hydrazobis[pyridine]-N1:N1']][4,4'-hydrazobis[pyridine]-N1]bis[[4,4',4'',4'''-(21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[2,6-bis(1,1-dimethylethyl)phenolato]](2-)-N21,N22,N23,N24]di- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **143849-72-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and oxidation of, by iodine)
RN 143849-72-3 CAPLUS
CN Ruthenium, [4,4'-hydrazobis[pyridine]-N1][[4,4',4'',4'''-(21H,23H-porphine-5,10,15,20-tetrayl)tetrakis[2,6-bis(1,1-dimethylethyl)phenolato]](2-)-N21,N22,N23,N24]-, (SP-5-21)- (9CI) (CA INDEX NAME)

PAGE 1-A




PAGE 2-A

L13 ANSWER 28 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1988:56040 CAPLUS
DOCUMENT NUMBER: 108:56040
TITLE: Synthesis of new 3-(pyridin-6-yl)pyrazolo[1,5-a]pyrimidines
AUTHOR(S): Ibrahim, Nadia Sobhy; Mohamed, Mona Hassan; Elnagdi, Mohamed Hilmy
CORPORATE SOURCE: Fac. Sci., Cairo Univ., Giza, Egypt
SOURCE: Archiv der Pharmazie (Weinheim, Germany) (1987), 320(6), 487-91
CODEN: ARPMAS; ISSN: 0365-6233
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 108:56040
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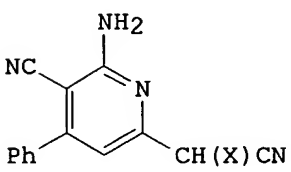
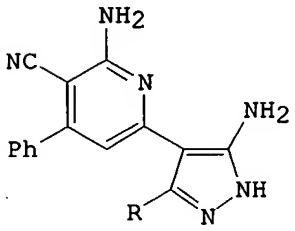
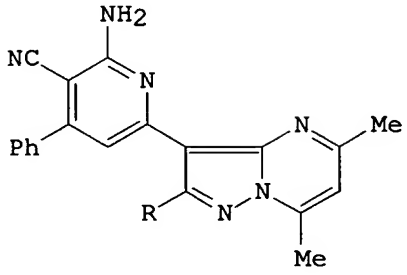



I



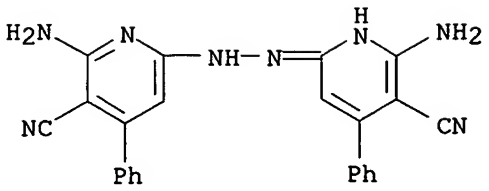

II



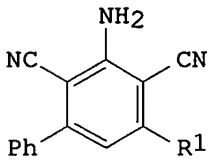

III

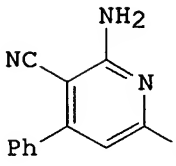
AB Reaction of PhCMe:C(CN)2 with Cl3CC(NH2):C(X)CN (X = CN, CO2Et, COPh) in pyridine gave (cyanomethyl)pyridines I (same X). Cyclization of I (X = CN, CO2Et) with NH2NH2 gave (aminopyrazolyl)pyridines II (R = NH2, OH) the last were cyclocondensed with acetylacetone to give the title compds. III (same R).

IT **106763-24-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 106763-24-0 CAPLUS
CN 3-Pyridinecarbonitrile, 6,6'-hydrazobis[2-amino-4-phenyl- (9CI) (CA INDEX NAME)



L13 ANSWER 29 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1987:213550 CAPLUS
DOCUMENT NUMBER: 106:213550
TITLE: α,β-Unsaturated nitriles in organic synthesis: a novel synthesis of biaryls and azabiaryls
AUTHOR(S): Abdel Galil, Fathy M.; Elnagdi, Mohamed H.
CORPORATE SOURCE: Fac. Sci., Cairo Univ., Egypt
SOURCE: Liebigs Annalen der Chemie (1987), (5), 477-9
CODEN: LACHDL; ISSN: 0170-2041
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 106:213550
GI



II


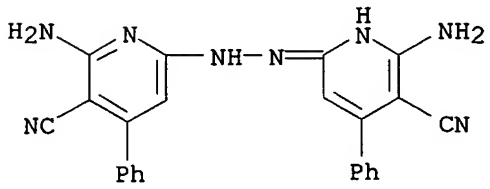
III

AB Treating PhCMe:C(CN)2 (I) with R1CH:CRCN (R = CSNH2, CO2Et, COPh; R1 = 4-MeOC6H4, 4-ClC6H4, 2-furyl, Ph) and piperidine in CH2Cl2 gave up to 72% aminoaryldicyanobenzenes II. Treating I with CH2(CN)2 and Cl3CCN gave 65 and 55% aminocyanophenylpyridines III (R2 = NCCH2, Cl3C) resp.

IT **106763-24-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 106763-24-0 CAPLUS

CN 3-Pyridinecarbonitrile, 6,6'-hydrazobis[2-amino-4-phenyl- (9CI) (CA INDEX NAME)



L13 ANSWER 30 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1986:79163 CAPLUS
DOCUMENT NUMBER: 104:79163
TITLE: Electrophotographic materials
INVENTOR(S): Enomoto, Kazuhiro
PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 60149048 | A2 | 19850806 | JP 1984-5320 | 19840113 |
| JP 03056629 | B4 | 19910828 | | |
| PRIORITY APPLN. INFO.: | | | JP 1984-5320 | 19840113 |

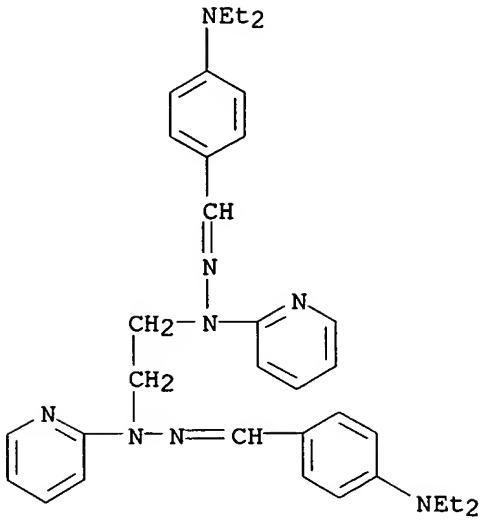
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title materials comprise a charge carrier-transport layer containing I (R = allyl, propargyl, C1-4 alkyl, benzyl, Ph; R1 = C1-2 alkyl, halo, C1-2 alkoxy, H; R2 = Ph, C1-4 alkyl, H; R3 = Ph, 2-pyridyl; n = 0, 1; m = 1-12). The materials show high photosensitivity and durability. Thus, p-diethylaminobenzaldehyde 2-pyridylhydrazone (prepared from a 1:1 mol mixture of p-diethylaminobenzaldehyde and 2-hydrazinopyridine) 6.0 and 1,2-dibromoethane 1.9 g were dissolved in DMF 40 mL, 3N NaOH 8.0 mL added dropwise at room temperature, and the mixture stirred for 6 h to obtain I (R = Et; R1 = H; R2 = H; n = 0; m = 2; R3 = 2-pyridyl; yellow-orange powder; m.p. 158-160°) (II) 5.6 g. An Al-laminated polyester film (polyester film 85 μ thick; Al film 10 μ thick) was coated with a butylamine solution containing 1% III, dried to form a charge carrier-generating layer 0.2 μ thick, coated with a dichloroethane solution containing a 10% 1:1.2 II-U-Polymer (polyacrylate) mixture, and dried to form a charge carrier-transport layer 12 μ thick. The obtained electrophotog. material showed high sensitivity to visible light and excellent durability.

IT **100070-53-9**
RL: USES (Uses)
(charge carrier-transporting agent, for electrophotog. plates)

RN 100070-53-9 CAPLUS
CN Benzaldehyde, 4-(diethylamino)-, 1,2-ethanediylbis(2-pyridinylhydrazone) (9CI) (CA INDEX NAME)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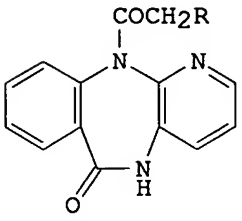
L13 ANSWER 31 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1984:34516 CAPLUS
DOCUMENT NUMBER: 100:34516
TITLE: New synthesis of 11-acyl-5,11-dihydro-6H-pyrido[2,3-b][1,4]benzodiazepin-6-ones and related studies
AUTHOR(S): Kovac, T.; Oklobdzija, M.; Comisso, G.; Decorte, E.; Fajdiga, T.; Moimas, F.; Angeli, C.; Zonno, F.; Toso, R.; Sunjic, V.
CORPORATE SOURCE: Chem. Res. Co., San Giovanni, Italy
SOURCE: Journal of Heterocyclic Chemistry (1983), 20(5), 1339-49
CODEN: JHTCAD; ISSN: 0022-152X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 100:34516
GI



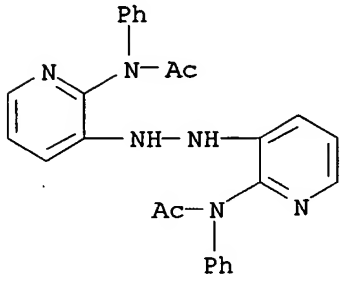
I

AB 11-Acyl-5,11-dihydro-6H-pyrido[2,3-b][1,4]benzodiazepin-6-ones I (R = 4-methylpiperazino, imidazolo, 2-methylimidazolo) were prepared via N-α-chloroacetylation and aminolysis. Other attempts at cyclization to form I are also reported.

IT **88369-71-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 88369-71-5 CAPLUS

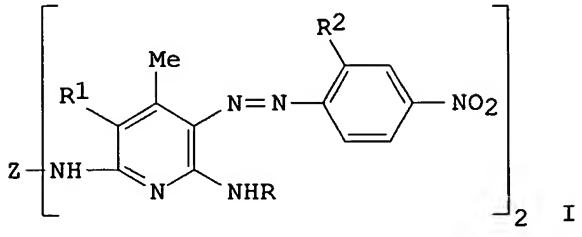
CN Acetamide, N,N'-(hydrazodi-3,2-pyridinediyl)bis[N-phenyl- (9CI) (CA INDEX NAME)



L13 ANSWER 32 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1984:8494 CAPLUS
DOCUMENT NUMBER: 100:8494
TITLE: Disperse disazo dyes
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 58101158 | A2 | 19830616 | JP 1981-199628 | 19811210 |

PRIORITY APPLN. INFO.: JP 1981-199628 19811210
GI



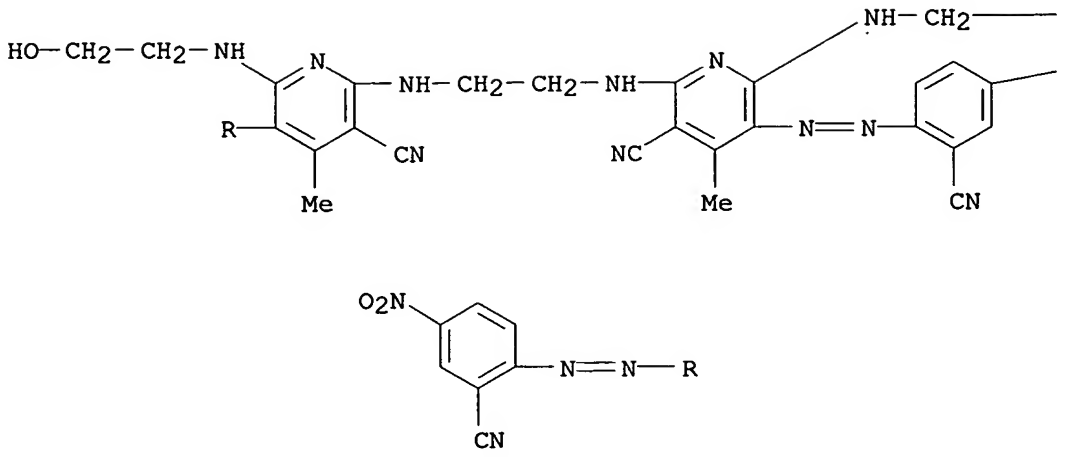

I

AB Pyridine ring-containing disazo dyes, e.g. I (R = CH2CH2OH; R1 = R2 = CN; Z = CH2CH2) (II) [**88183-51-1**] and I (R = CH2CHMeOEt; R1 = CONH2; R2 = H; Z = (CH2)3) [**88183-52-2**], were prepared and used for dyeing polyester fibers and plastics. Thus, 2,6-dichloro-3-cyano-4-methylpyridine [875-35-4] was condensed with ethylenediamine [107-15-3] and then with 2-hydroxyethylamine [141-43-5] to give mainly N,N'-bis[3-cyano-6-(2-hydroxyethylamino)-4-methyl-2-pyridyl]ethylenediamine [88183-48-6], which was then coupled with diazotized 2-cyano-4-nitroaniline [17420-30-3] to give II, fast red on polyester fiber and in ABS [9003-56-9].

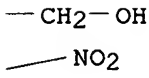
IT **88183-51-1 88183-52-2**
RL: MSC (Miscellaneous)
(dyes, for polyester fibers and plastics, manufacture of)

RN 88183-51-1 CAPLUS
CN 3-Pyridinecarbonitrile, 2,2'-(1,2-ethanediyldiimino)bis[5-[(2-cyano-4-nitrophenyl)azo]-6-[(2-hydroxyethyl)amino]-4-methyl- (9CI) (CA INDEX NAME)

PAGE 1-A

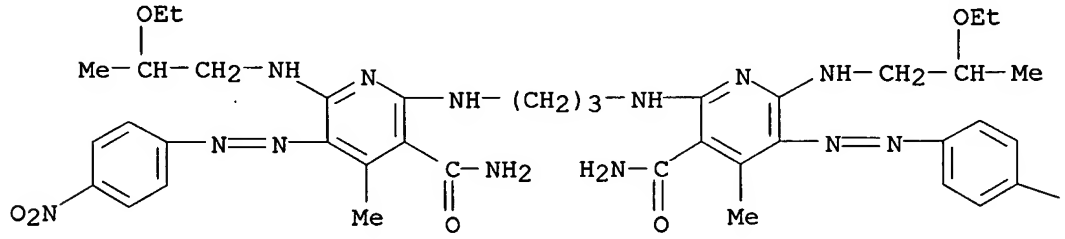


PAGE 1-B



RN 88183-52-2 CAPLUS
CN 3-Pyridinecarboxamide, 2,2'-(1,3-propanediyldiimino)bis[6-[(2-ethoxypropyl)amino]-4-methyl-5-[(4-nitrophenyl)azo]- (9CI) (CA INDEX NAME)

PAGE 1-A

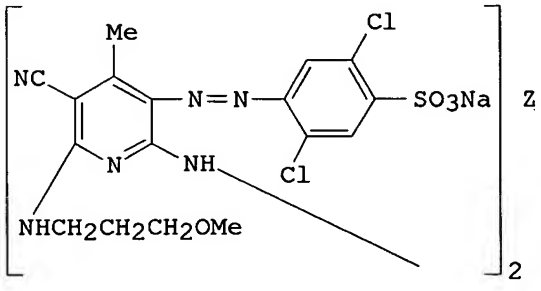


PAGE 1-B

L13 ANSWER 33 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1976:448266 CAPLUS
DOCUMENT NUMBER: 85:48266
TITLE: 2,6-Diaminopyridine dyes
INVENTOR(S): Dehnert, Johannes; Lamm, Gunther
PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.
SOURCE: Ger. Offen., 25 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| DE 2454492 | A1 | 19760520 | DE 1974-2454492 | 19741116 |
| BE 835494 | A1 | 19760301 | BE 1975-161797 | 19751112 |
| FR 2291257 | A1 | 19760611 | FR 1975-34885 | 19751114 |
| JP 51073027 | A2 | 19760624 | JP 1975-136448 | 19751114 |

PRIORITY APPLN. INFO.: DE 1974-2454492 A 19741116
GI



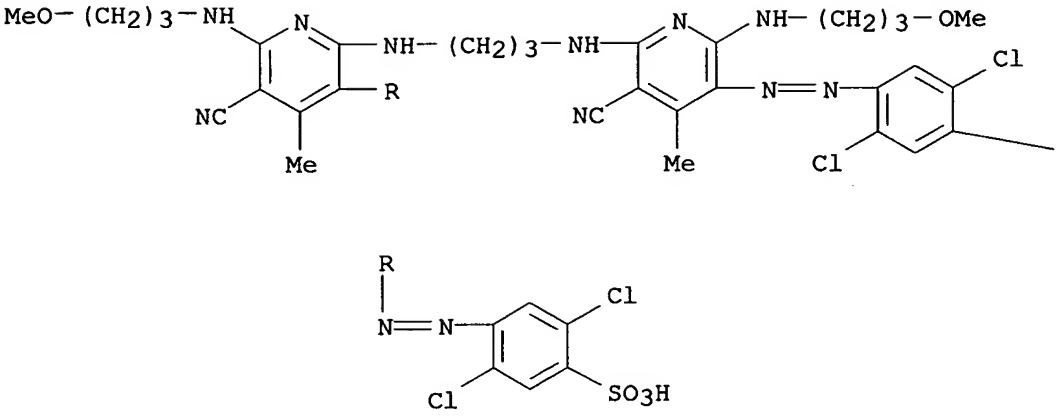

I

AB Two azo dyes (I, Z = CH2CH2CH2, CH2C6H3SO3Na) were prepared by coupling diazotized 2,5,4-Cl2(HO3S)C6H2NH2 [88-50-6] with the appropriate coupler and dyed polyamide and wool fibers fast reddish yellow to yellow shades.

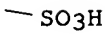
IT **59866-42-1**
RL: USES (Uses)
(dye, for polyamide and wool fibers, preparation of)

RN 59866-42-1 CAPLUS
CN Benzenesulfonic acid, 2,5-dichloro-4-[[5-cyano-2-[[3-[[3-cyano-5-[(2,5-dichloro-4-sulfophenyl)azo]-6-[(3-methoxypropyl)amino]-4-methyl-2-pyridinyl]amino]propyl]amino]-6-[(3-methoxypropyl)amino]-4-methyl-3-pyridinyl]azo]-, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



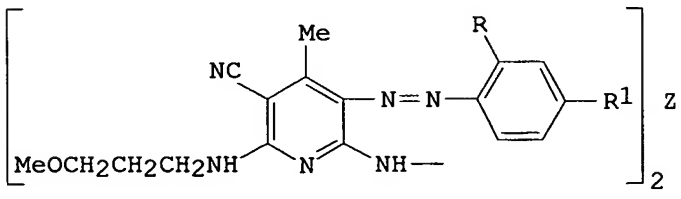
PAGE 1-B



L13 ANSWER 34 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1976:166240 CAPLUS
DOCUMENT NUMBER: 84:166240
TITLE: 2,6-Diaminopyridine dyes
INVENTOR(S): Dehnert, Johannes; Lamm, Gunther
PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.
SOURCE: Ger. Offen., 31 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| DE 2438130 | A1 | 19760219 | DE 1974-2438130 | | 19740808 |
| US 3974123 | A | 19760810 | US 1975-551493 | | 19750220 |
| NL 7502419 | A | 19750903 | NL 1975-2419 | | 19750228 |
| FR 2262681 | A1 | 19750926 | FR 1975-6343 | | 19750228 |
| JP 50124942 | A2 | 19751001 | JP 1975-24108 | | 19750228 |
| GB 1499181 | A | 19780125 | GB 1975-8384 | | 19750228 |
| PRIORITY APPLN. INFO.: | | | DE 1974-2409754 | A | 19740301 |
| | | | DE 1974-2437203 | A | 19740802 |
| | | | DE 1974-2438130 | A | 19740808 |

GI



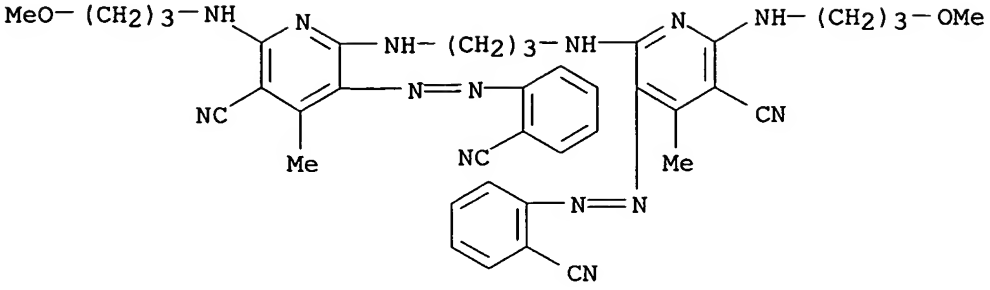

I

AB Two azo dyes (I, R = CF3, CN; R1 = H, Cl; Z = CH2CH2CH2, p-CH2C6H4) were prepared and mass dyed polystyrene [9003-53-6], PVC [9002-86-2], polypropylene [9003-07-0], polyethylene [9002-88-4], polyamides, and polyester fast, strong yellow shades. Thus, 2,6-dichloro-3-cyano-4-methylpyridine [875-35-4] was successively treated with H2NCH2CH2CH2NH2 [109-76-2] and MeOCH2CH2CH2NH2 [5332-73-0] to give coupling component [59000-71-4] which was coupled with diazotized 2-H2NC6H4CN [1885-29-6] to give I (R = CN, R1 = H) [**59000-72-5**]. The other I was similarly prepared

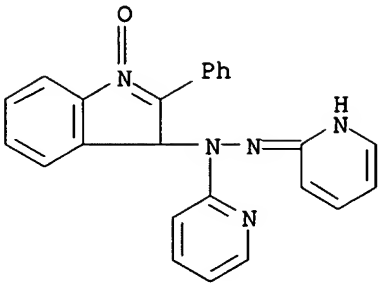
IT **59000-72-5**
RL: USES (Uses)
(dye, for thermoplastics, preparation of)

RN 59000-72-5 CAPLUS

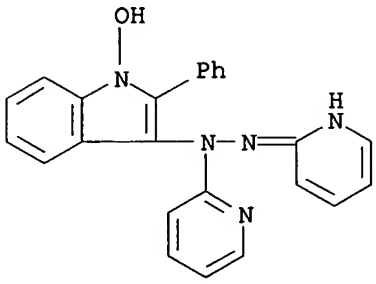
CN 3-Pyridinecarbonitrile, 6,6'-(1,3-propanediyldiimino)bis[5-[(2-cyanophenyl)azo]-2-[(3-methoxypropyl)amino]-4-methyl- (9CI) (CA INDEX NAME)



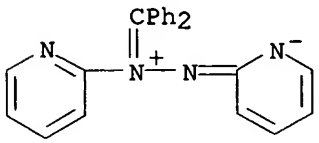
L13 ANSWER 35 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1968:402782 CAPLUS
DOCUMENT NUMBER: 69:2782
TITLE: Alkene analogs and their synthesis. XX. Reactions of 1-hydroxy-2-phenylindole with nitrogen-heterocycle azo compounds. (Electron transfer processes.)
AUTHOR(S): Colonna, Martino; Bruni, Paolo
CORPORATE SOURCE: Univ. Bologna, Italy
SOURCE: Gazzetta Chimica Italiana (1967), 97(11), 1584-93
CODEN: GCITA9; ISSN: 0016-5603
DOCUMENT TYPE: Journal
LANGUAGE: Italian
GI For diagram(s), see printed CA Issue.
AB The title indole (I) is treated with sym. and unsym. azo compds. to give mixts. containing II. Thus, a mixture of 1.6 g. I, 1.5 g. 2,2'-azopyridine (III), and 130 ml. C6H6 is refluxed 5 hrs. to give 1.5 g. 2-phenyl-3-(2-pyridylimino)indole N-oxide (IV), m. 212-13° (EtOH), and a small amount II, m. 225°. The same products are obtained in EtOH. A mixture of 1.4 g. I, 1.2 g. III, and 150 ml. Et2O is kept 5 hrs. to give 2-phenyl-3-[1,2-bis(2-pyridyl)hydrazino]-3H-indole N-oxide (V), m. 136-40°. A mixture of 0.5 g. V and EtOH is refluxed 5 hrs. to give IV. A solution of 0.5 g. V and 50 ml. EtOH containing 5 ml. concentrated HCl is kept 30 min. to give 2-phenylisatogen, m. 186°, also obtained from IV in EtOH containing HCl. A solution of 4.75 g. I in 500 ml. ether is mixed with a solution of 4 g. 4,4'-azopyridine (VI) and 150 ml. ether and the mixture kept 20 days to give 4.60 g. 4,4'-hydrazopyridine (VII), m. 255-60 (pyridine-ligroine), and II, m. 225°. A solution of 2 g. I in 100 ml. C6H6 is added to a solution of 1.7 g. VI in 30 ml. C6H6 and the mixture refluxed to give 2.15 g. VII, m. 255-60° (pyridine-ligroine), and bis(1-hydroxy-2-phenyl-3-indolyl) (VIII), m. 165°. A mixture of 2.75 g. I, 2.4 g. 2-phenylazopyridine, and 170 ml. C6H6 is refluxed 6 hrs. to give 2.15 g. IV, m. 212-13° (EtOH), and a small amount II, m. 225°. A mixture of I, 2-phenyl-azopyridine, and ether is kept 4 days at room temperature to give a small amount IV. A solution of 2.75 g. I in 150 ml. C6H6 is mixed with a solution of 2.4 g. 3-phenylazopyridine and 20 ml. C6H6 and the mixture refluxed 6 hrs. to give VIII. A mixture of a solution of 4 g. I in 280 ml. C6H6 and a solution of 3.6 g. 4-phenylazopyridine in 20 ml. C6H6 is refluxed 8 hrs. to give a mixture of II and VIII.
IT **19971-22-3P 20678-42-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 19971-22-3 CAPLUS
CN 3H-Indole, 3-(1,2-di-2-pyridylhydrazino)-2-phenyl-, 1-oxide (8CI) (CA INDEX NAME)



RN 20678-42-6 CAPLUS
CN Indole, 3-(1,2-di-2-pyridylhydrazino)-1-hydroxy-2-phenyl- (8CI) (CA INDEX NAME)



L13 ANSWER 36 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1968:29552 CAPLUS
DOCUMENT NUMBER: 68:29552
TITLE: Enamines. XVIII. N-Ylids in reaction with N-heteroaromatic azo compounds
AUTHOR(S): Colonna, Martino; Bruni, Paolo; Guerra, Guido
CORPORATE SOURCE: Univ. Bologna, Bologna, Italy
SOURCE: Gazzetta Chimica Italiana (1967), 97(6), 1052-60
CODEN: GCITA9; ISSN: 0016-5603
DOCUMENT TYPE: Journal
LANGUAGE: Italian
GI For diagram(s), see printed CA Issue.
AB I and II are prepared from ylids of pyridinium salts. Thus, a mixture of a solution of 1.8 g. 2,2'-azopyridine (III) in 20 ml. C6H6 and a solution of 1.9 g. 9-diazofluorene in 30 ml. C6H6 is refluxed 90 min. to give I, m. 227-8° (C6H6-ligroine). A solution of 1.62 g. N-(9-fluorenyl)pyridinium bromide ylid in 20 ml. EtOH is treated with a solution of 1 g. III in 20 ml. EtOH, 20 ml. NaOH solution (prepared from 20 ml. 2N NaOH and 80 ml. EtOH) is added, and the mixture is agitated to give 1.1 g. I, m. 227-8° (C6H6-ligroine). Similarly prepared are (m.p. given): II (Ar = Ph) (IV), 184-5° (EtOH); II (Ar = 2-pyridyl) (V), 194-5° (EtOH). A solution of 1 g. IV and 25 ml. 10% HCl is heated to give quinoline-2-carboxaldehyde phenylhydrazone (VI), m. 204-5° (EtOH) and 2-(2-phenylhydrazino)pyridine. A solution of 0.5 g. V in 25 ml. 10% HCl is heated and PhNHNH2 is added to give VI, m. 204-5°, and 2,2'-hydrazobis(pyridine), m. 168° (water). Uv data are given.
IT **17170-59-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 17170-59-1 CAPLUS
CN Hydrazinium, 1-(diphenylmethylene)-1,2-di-2-pyridyl-, hydroxide, inner salt (8CI) (CA INDEX NAME)

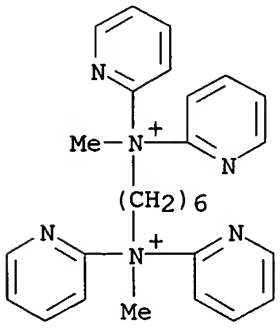


L13 ANSWER 37 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1958:51276 CAPLUS
DOCUMENT NUMBER: 52:51276
ORIGINAL REFERENCE NO.: 52:9296c-e
TITLE: Antimicrobial activities of α,ω-bis(2,2'-dipyridylamino)-alkane bisquaternary salts
AUTHOR(S): Gadebusch, H. H.; Cavallito, C. J.
CORPORATE SOURCE: Irwin, Neisler & Co., Decatur, IL
SOURCE: Antibiotics and Chemotherapy (Washington, D. C.) (1957), 7, 549-52
CODEN: ANTCAO; ISSN: 0570-3123
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB cf. C.A. 50, 12117g. Compds. I through V were prepared by the reaction of alkyl halides with tetrapyridylalkylenediamines Z2N(CH2)xNZ2.2RX (Z = 2-pyridyl) to yield quaternary salts, in which one pyridino ring of each Z2N group presumably was alkylated. I, x = 4, RX = CH3I; II, 6, CH3I; III, 10, CH3I; IV, 10, C2H5I; V, 10, n-C5H11I; VI, 10, HCl. Inhibitory activity markedly increased in proceeding from (CH2)4 to (CH2)10 linking chains. Among the C10 linked compds. the nonquaternized. derivative (VI) was relatively inactive compared with the alkylated diquaternaries (III, IV, and V). III and IV killed Trichomonas foetus at 1:10,000 in <3 min. No significant difference was evident in sensitivity of Staphylococcus aureus to III and IV after 32 transfers. The growth-inhibitory effects of the compds. was not related to surface-tension-depressant properties. Antibacterial activity was antagonized by anionic detergents and protein. The intravenous L.D.50 in mice of II and IV were 0.8 and 1.15 mg./kg., resp.

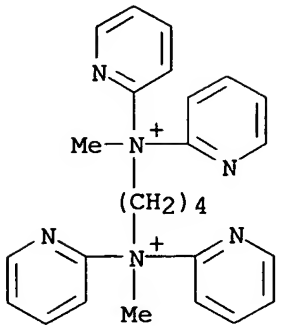
IT **124114-89-2**, Ammonium, hexamethylenebis[methyldi-2-pyridyl- iodide] **124145-82-0**, Ammonium, tetramethylenebis[methyldi-2-pyridyl- iodide]
(bactericidal activity of)

RN 124114-89-2 CAPLUS
CN Hexamethylenebis[methyldi-2-pyridylammonium iodide] (6CI) (CA INDEX NAME)



●2 I⁻

RN 124145-82-0 CAPLUS
CN Tetramethylenebis[methyldi-2-pyridylammonium iodide] (6CI) (CA INDEX NAME)



●2 $I^-$

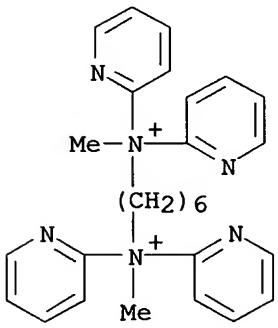
L13 ANSWER 38 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1956:64819 CAPLUS
DOCUMENT NUMBER: 50:64819
ORIGINAL REFERENCE NO.: 50:12117g-i
TITLE: Tetrapyridylalkylenediamines
INVENTOR(S): Cavallito, Chester J.
PATENT ASSIGNEE(S): Irwin, Neisler and Co.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 2732378 | | 19560124 | US | 00000000 |

AB Alkylene dihalides treated with the Na derivative of dipyridylamine in a hydrocarbon solvent gave tetrapyridylalkylene-diamines. Thus, NaH 4.8 (0.2 mol), di-2-pyridylamine 34.4 (0.2 mol) and dry PhMe 400 mL. refluxed 8 h. with stirring in a N atmospheric (this solution was used to react with the dihalides), Br(CH2)6Br 24.4 (0.1 mol) added slowly, stirring and refluxing continued 16 h., the solution cooled, filtered, and the filtrate concentrated gave an amorphous residue which, washed with a small amount of Skellysolve B to remove the excess of starting material, yielded 1,6-bis(di-2-pyridyl-amino)hexane, indefinite m.p.; di-MeI salt, m. 98-100° (decomposition). Also prepared was 1,10-bis(di-2-pyridylamino)decane; di-HCl salt; di-EtI salt, m. 72-82°; di-AmI salt, m. about 80°; di-MeI salt, m. about 88°. These compds. are said to be useful as antibacterial, antifungal and trichomonacidal agents, and as chemical intermediates.

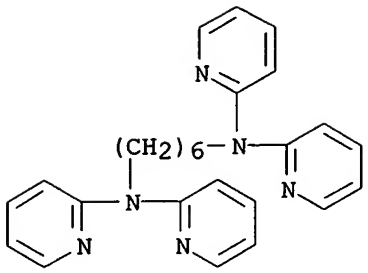
IT **124114-89-2**, Ammonium, hexamethylenebis[methyldi-2-pyridyl-iodide] **855922-20-2**, Pyridine, 2,2',2'',2'''-(hexamethylenedinitrilo)tetra-
(preparation of)

RN 124114-89-2 CAPLUS
CN Hexamethylenebis[methyldi-2-pyridylammonium iodide] (6CI) (CA INDEX NAME)

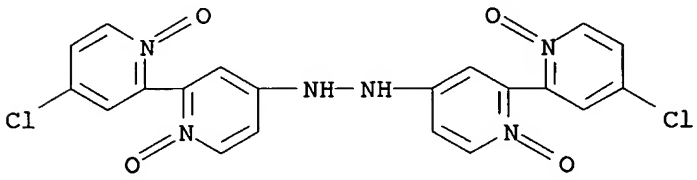


●2 I⁻

RN 855922-20-2 CAPLUS
CN 1,6-Hexanediamine, N,N,N',N'-tetra-2-pyridyl- (5CI) (CA INDEX NAME)



L13 ANSWER 39 OF 39 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1956:16382 CAPLUS
DOCUMENT NUMBER: 50:16382
ORIGINAL REFERENCE NO.: 50:3436a-e
TITLE: Chemical properties of 2,2'-bipyridine. II
AUTHOR(S): Haginiwa, Joju
CORPORATE SOURCE: Chiba Univ.
SOURCE: Yakugaku Zasshi (1955), 75, 733-6
CODEN: YKKZAJ; ISSN: 0031-6903
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.
AB III in concentrated HCl heated 4 hrs. at 100° yields a di-Cl derivative, C10H6O2N2Cl2, m. 261° (decomposition), and in 30% H2SO4, heated 4 hrs. at 100°, yields a di-OH derivative, C10H8O4N2, m. 308° (decomposition). III (1.8 g.). 20 ml. PhCH2OH, and 0.3 g. Na in 15 ml. PhCH2OH let stand 48 hrs., the PhCH2OH removed, and the residue recrystd. from EtOH give 2.2 g. a di-PhCH2O derivative, C24H26O4N2, m. 228° (decomposition). III (1.5 g.) in 5 ml. PCl3 heated 4 hrs. at 60°, the PCl3 removed, the residue in water made alkaline with Na2CO3 and recrystd. from EtOH gives 1.2 g. 4,4'-dichloro-2,2'-bipyridine (IV), needles, m. 143°; 1 g. IV in 200 ml. water heated with 6 g. KMnO4 and 0.6 ml. H2SO4, the product filtered while hot and the filtrate cooled gives 0.05 g. 4,2-Cl(HO2C)C5H3N, needles, m. 183°. The NO2 groups in III, therefore, must be in 4,4'-positions, and can be used as the HNO2-supplying agent; e.g., 0.5 g. III, 1 g. PhNH2.HCl, 4 ml. PhNH2, and 2 drops water heated 20 hrs. at 40-50° with 0.1 g. KI, the PhNH2 steam distilled and the residue recrystd. from EtOH give H2NC6H4N:NPh, m. 126°. Catalytic reduction of III in concentrated HCl gives V, which is rapidly oxidized to the azo compound in air.
IT **854245-21-9**, 2,2'-Bipyridine, 4,4''-hydrazobis[4'-chloro-, 1,1',1'',1'''-tetraoxide
(preparation of)
RN 854245-21-9 CAPLUS
CN 2,2'-Bipyridine, 4,4''-hydrazobis[4'-chloro-, 1,1',1'',1'''-tetraoxide (5CI) (CA INDEX NAME)



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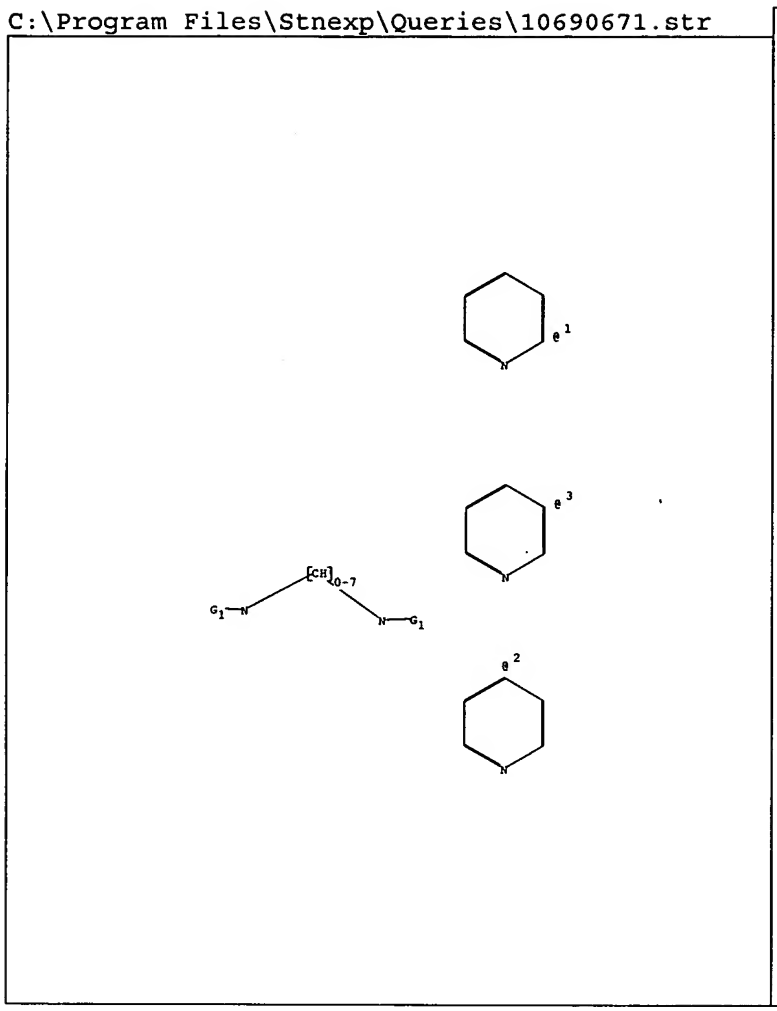

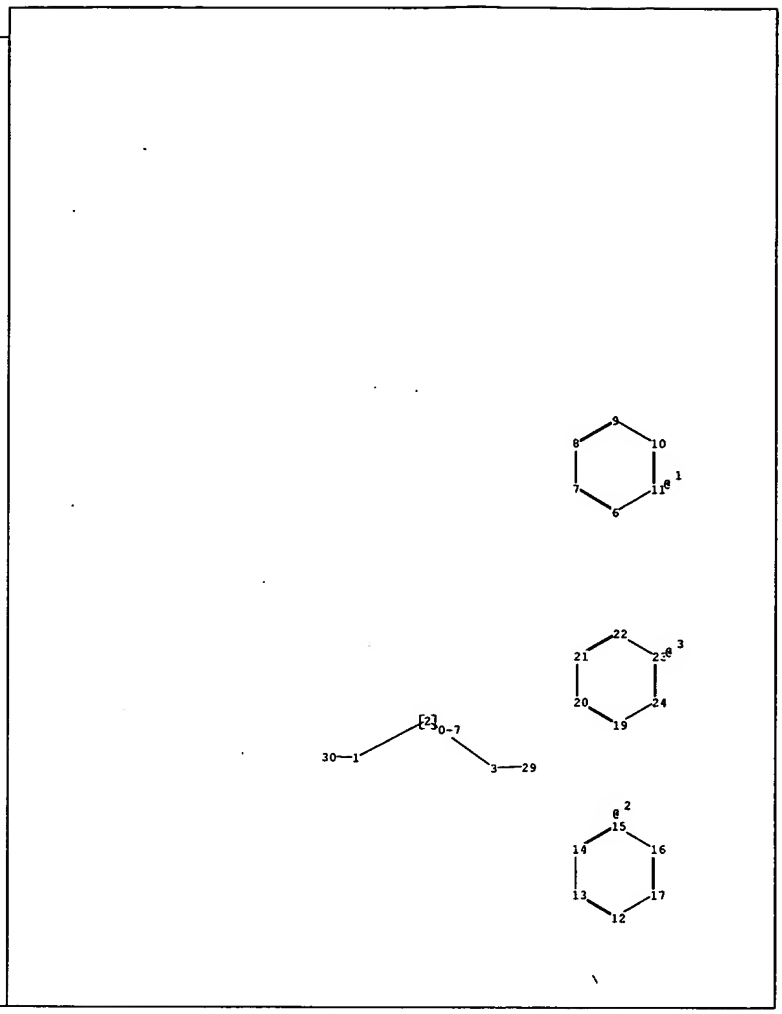

chain nodes :
1 2 3 29 30
ring nodes :
6 7 8 9 10 11 12 13 14 15 16 17 19 20 21 22 23 24
chain bonds :
1-2 1-30 2-3 3-29
ring bonds :
6-7 6-11 7-8 8-9 9-10 10-11 12-13 12-17 13-14 14-15 15-16 16-17 19-20 19-24
20-21 21-22 22-23 23-24
exact/norm bonds :
1-2 1-30 2-3 3-29
normalized bonds :
6-7 6-11 7-8 8-9 9-10 10-11 12-13 12-17 13-14 14-15 15-16 16-17 19-20 19-24
20-21 21-22 22-23 23-24
isolated ring systems :
containing 6 : 12 : 19 :

G1:[*1],[*2],[*3]

Match level :
1:CLASS 2:CLASS 3:CLASS 6:Atom 7:Atom 8:Atom 9:CLASS 10:Atom 11:Atom 12:Atom
13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom
24:Atom 29:CLASS 30:CLASS